SAMSUNG

VIDEO CASSETTE RECORDER

SV-7000W
SV-5000W

SERVICE *Manual*

For mechanical disassembly and adjustment, refer to the “Mechanical Manual” (DX-9R → AC68-00001A).

SERVICE MANUAL

SV-7000W/SV-5000W

SAMSUNG ELECTRONICS

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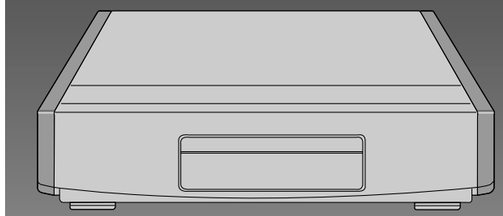
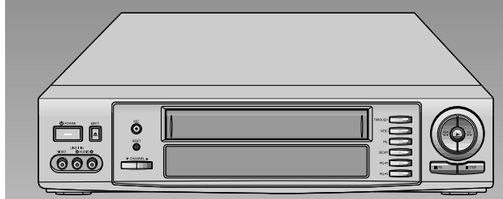
VIDEO CASSETTE RECORDER



SV-7000W



SV-5000W

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1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all pretective devices, including : control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1-1) :
   Warning : Do not use an isolation transformer during this test. Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

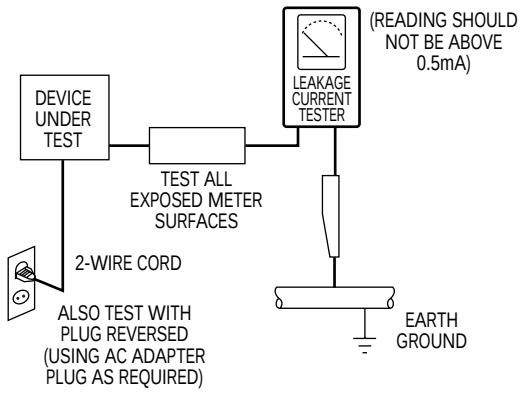

(READING SHOULD NOT BE ABOVE 0.5mA)
LEAKAGE CURRENT TESTER
DEVICE UNDER TEST
TEST ALL EXPOSED METER SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

5. With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known erath ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

6. Antenna Cold Check :
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong.
   Connect the other lead to the coaxial connector.

7. Some semiconductor ("solid state") devices are easily damaged by static electricity.
   Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

8. Immediately before handling sny semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

9. Design Alteration Warning :
   Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors.
   Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

10. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

11. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

12. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

13. Product Safety Notice :
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

    Components that are critical for safety are indicated in the circuit diagram by shading, (⚠ or ⚠).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

2. Reference Information

2-1 Important Service Guide

2-1-1 Mode switch (Program Switch) assembly point

1) When installing the ass'y full deck on the Main PCB, be sure to align the assembly point of mode switch.

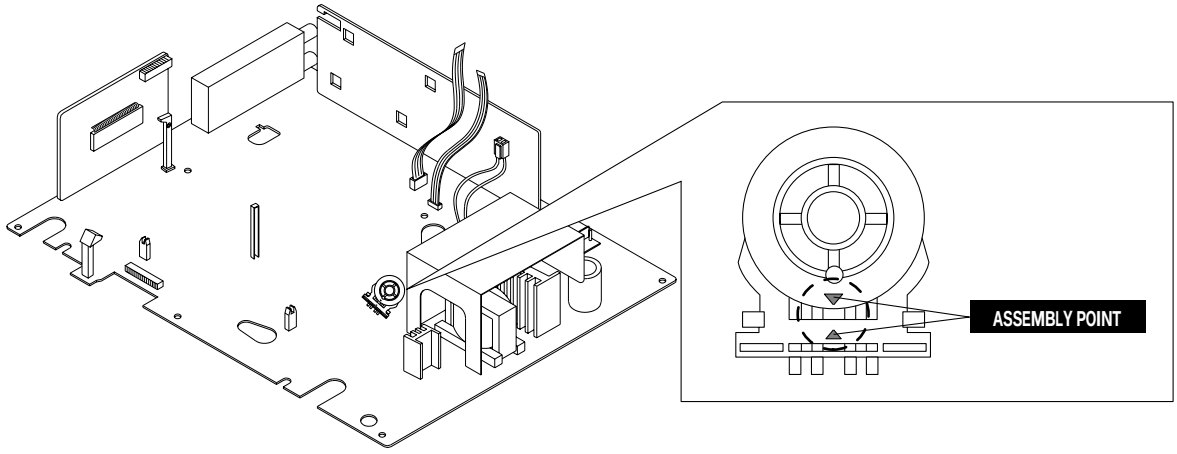


Fig. 2-1

2-1-2 How to eject the cassette tape
(If the unit does not operate on condition that tape is inserted into housing ass'y)

1) Remove the Holder Worm ❶ and the gear worm ❷. (See Fig. 2-2)
2) Turn the Gear Worm Wheel ❸ counterclockwise in the direction of arrow with screw driver. (See Fig. 2-2)
3) When Slider S, T are approached in the position of unloading, rotate holder Clutch counterclockwise after inserting screw driver in the hole of frame's bottom in order to wind the unwounded tape. (Refer to Fig. 2-3) (If you rotate Gear Worm Wheel continuously when tape is in state of unwinding, you may cause a tape conta mination by grease and tape damage. Be sure to wind the unwounded tape in the state of set horizontally.)
4) Rotate Gear Worm Wheel ❸ counterclockwise using screw driver again up to the state of eject mode and then pick out the tape. (Refer to Fig. 2-2)

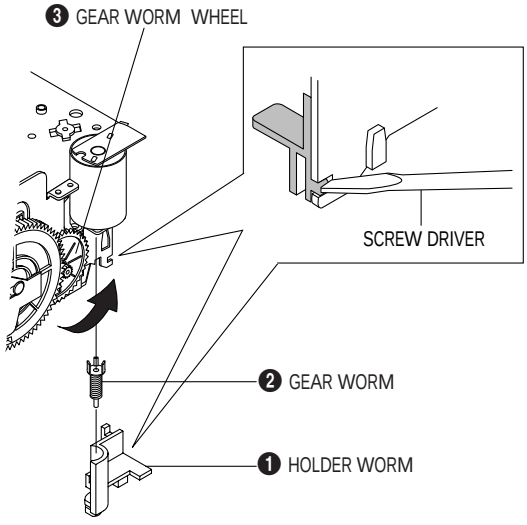


Fig. 2-2

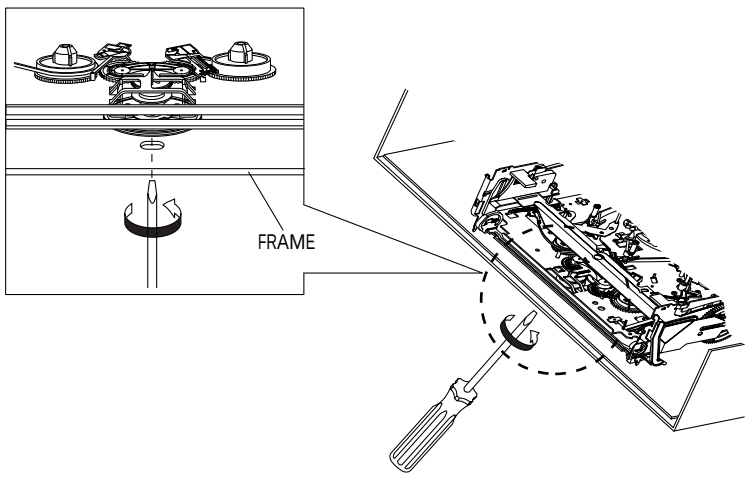


Fig. 2-3

2-2 Servicing Jigs and Special Tools (Only for SV-7000W)

2-2-1 Servicing Jig

Jig Item	Part No.	Use
E/Cable	68140-500-104	Use for Timer PCB (CN703, CN704) ◄—► Joint PCB (CN8J01, CN8J02)

This is the same as the E/CABLE-2 used for Model SV-4000W.

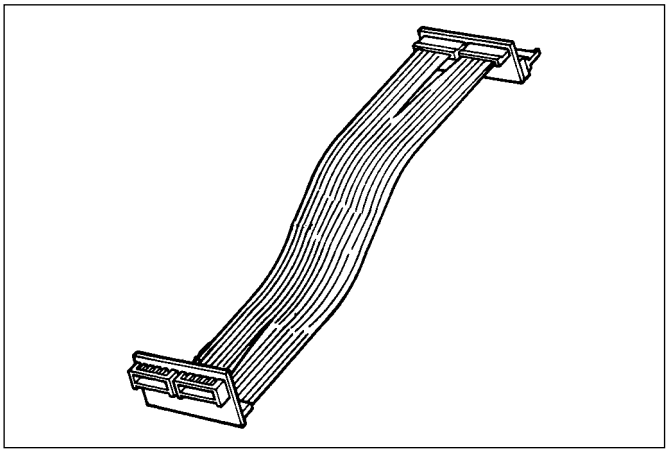


Fig. 2-4

2-2-2 How to Connection

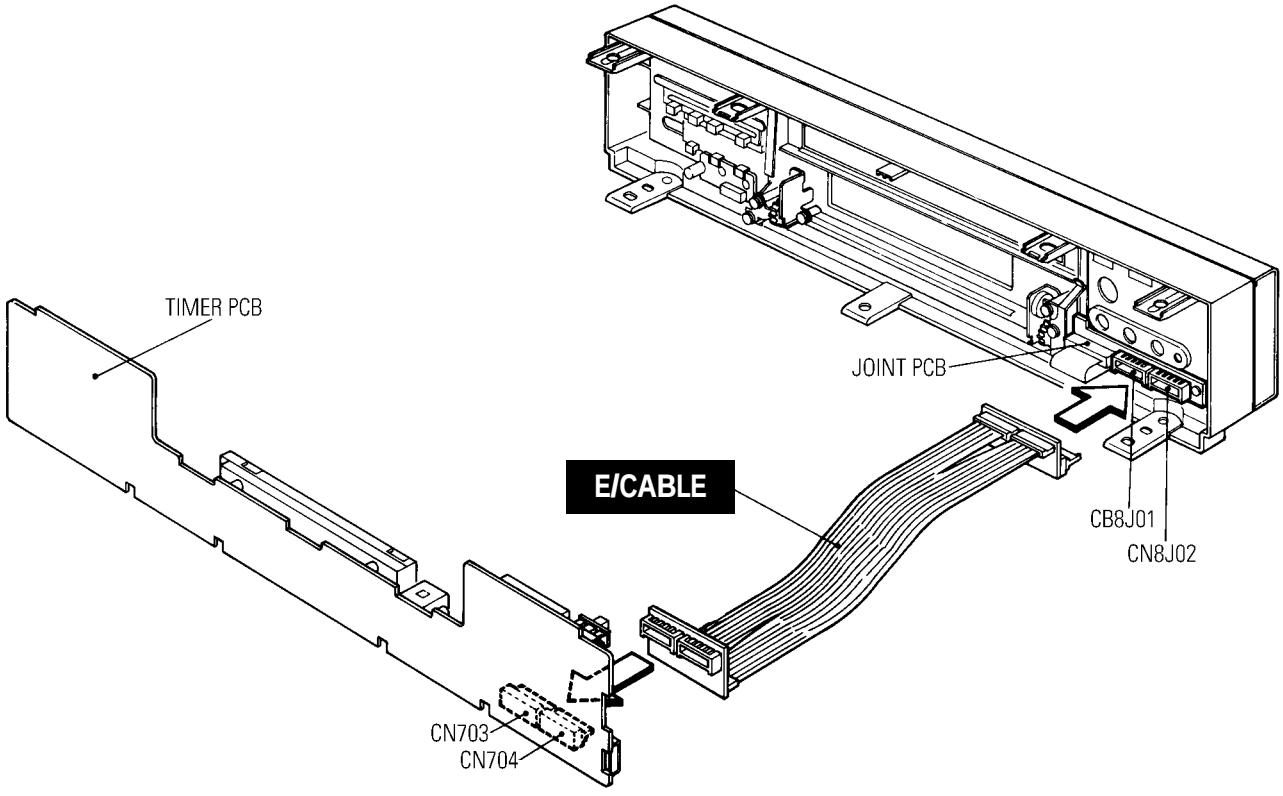


Fig. 2-5

3. Product Specifications

Design and specifications are subject to change without notice.

Operation	Description	
Recording system	Rotary head azimuth recording, luminance signal FM recording system	
	Crominance signal down converted phase shift recording system (NTSC, PAL, PAL-M)	
	Chrominance signal down converted direct recording system (MESECAM)	
	Chrominance signal 1/4 frequency countdown direct recording system (SECAM)	
Color system	NTSC3.58, NTSC4.43, PAL, PAL-M, PAL-N, SECAM	
Tuning system	SV-7000W/5000W ; B/G, D/K, I, M, N, L SV-5000W NTSC System ; B/G, D/K, I, M, N	
RF out	SV-7000W/5000W ; G/I/K/M/L, UHF CH21-CH69 SV-5000W NTSC System ; G/I/K/M, UHF CH21-CH69	
Tape recording/playback	NTSC, PAL, PAL-M, SECAM, MESECAM	
Tape speed	NTSC PAL-M	33.35mm/sec (standard recording : SP)
		11.12mm/sec (three times recording : SLP)
	PAL MESECAM SECAM	23.39mm/sec (standard recording : SP)
		11.69mm/sec (double speed recording : LP)
Tape format	VHS type video tape, S-VHS type video tape (Playback only)	
Recording time	Maximum 8 hours (with a T-160 tape or E-240tape)	
Rewinding time	within 3 minutes (high speed rewinding, T-120 or E-180 tpae)	
Video input	1.0Vp-p (unbalanced) 75 ohm	
Video output	1.0Vp-p (unbalanced) 75 ohm	
Video S/N	Above 43dB (standard recording)	
Resolution	Above 220 (standard recording NTSC), 240 (standard recording PAL)	
Audio input	-8dBm, 47 Kohm unbalanced	
Audio output	-8 +/- 3 dBm, 1 Kohm unbalanced	
Audio S/N	Above 39dB (Mono), 68dB (Hi-Fi)	
Audio frequency characteristics	20Hz-20KHz	
Rated voltage	100V~240V AC, 100V AC (JAPAN)	
Rated frequency	50/60Hz	
Power consumption	ARP. 24 watts on recording ; 8 watts off	
Working ambient temperature	41°F-104°F (5°C-40°C)	
Installation conditions	Operation position : Horizontal, Relative humidity : Below 80%	
Outside dimensions	SV-7000W : Width 465mm X Length 310mm X Height 98mm	
	SV-5000W : Width 430mm X Length 295mm X Height 98mm	
Weight	SV-7000W : 4.8Kg SV-5000W : 4.3Kg	

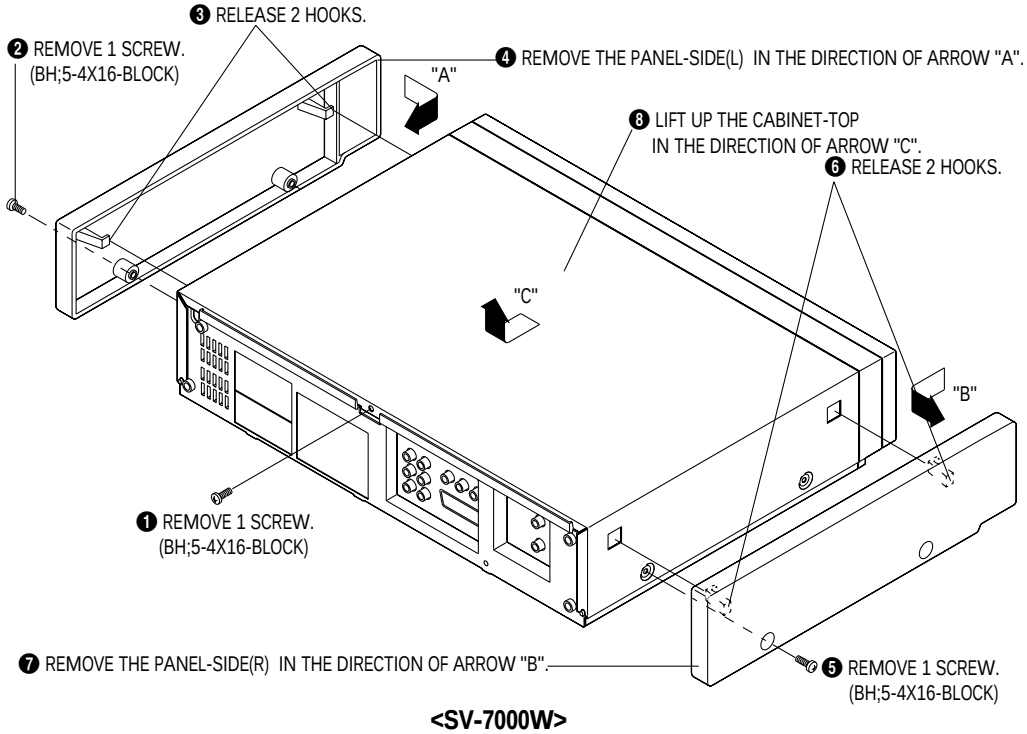
MEMO

4. Disassembly and Reassembly

4-1 Cabinet Assembly

Note : Disassemble in the order shown. Reassemble in reverse order.

4-1-1 Cabinet Top removal



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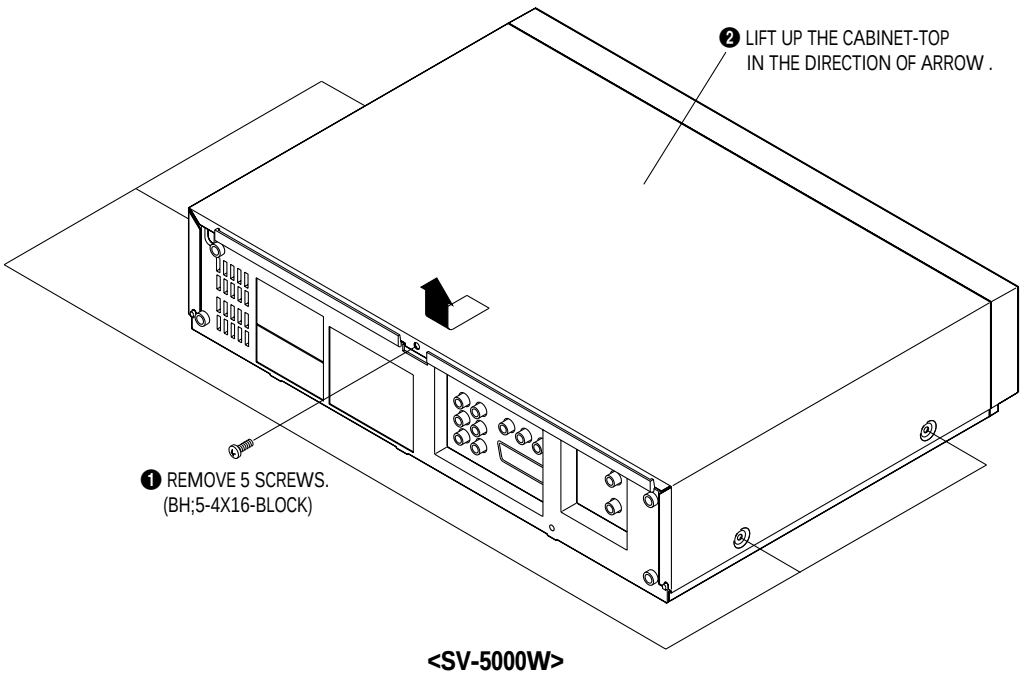

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Fig. 4-1 Cabinet Top removal

4-1-2 Bottom Cover removal

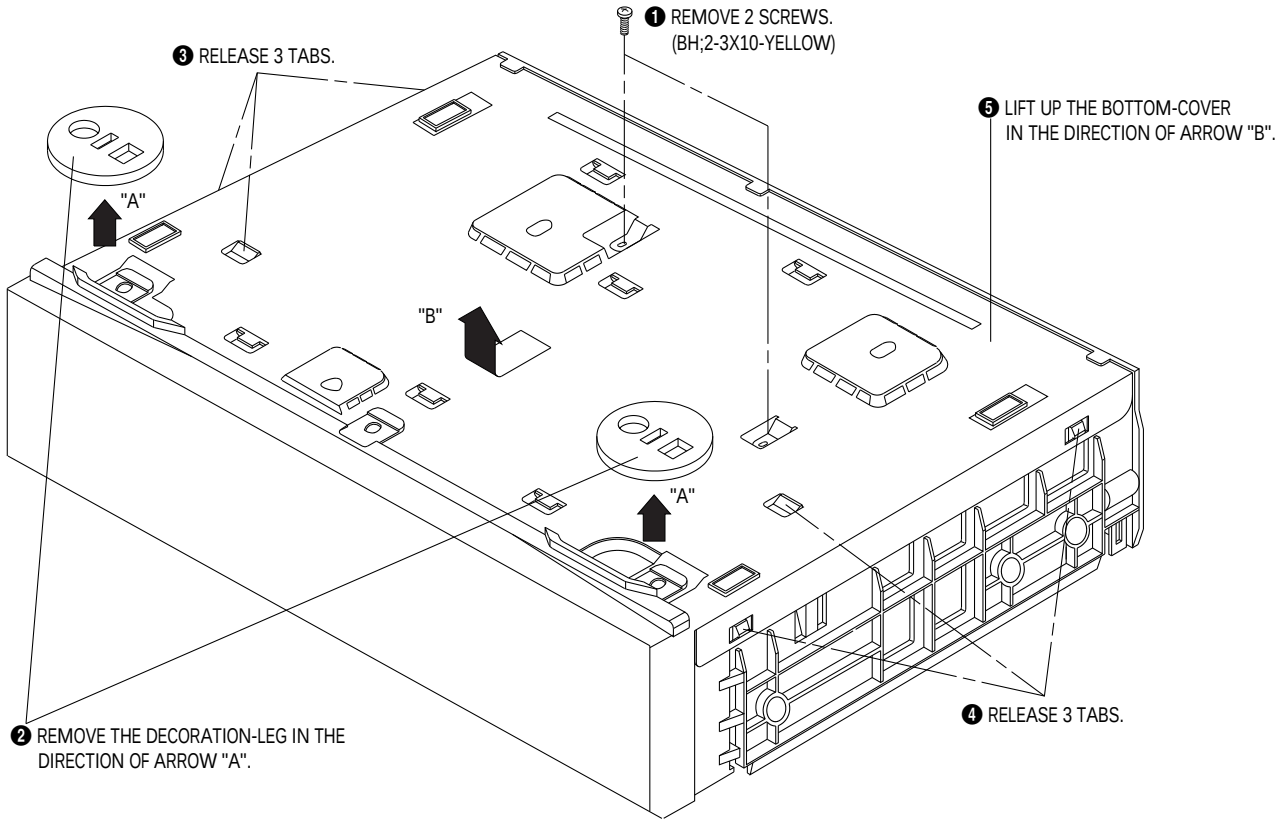
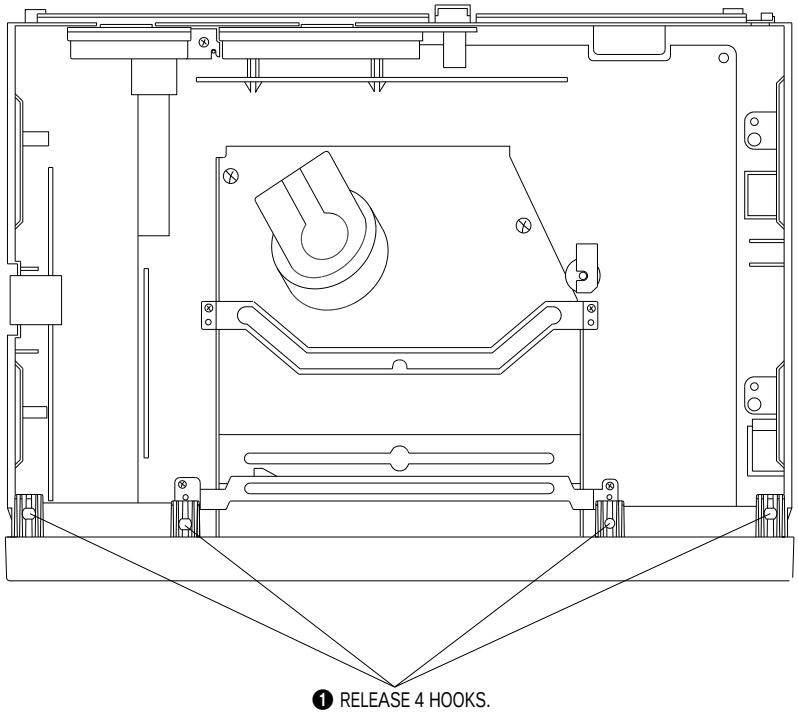
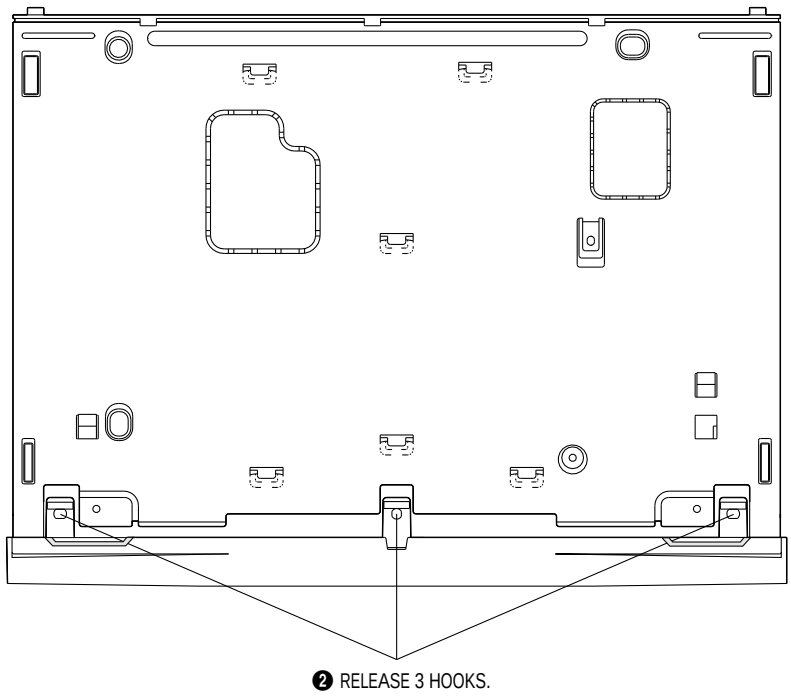


Fig. 4-2 Bottom Cover removal

4-1-3 Ass'y Front Panel removal



(Top view)



(Bottom view)

Fig. 4-3 Ass'y Front Panel removal

4-1-4 Ass'y Timer removal

Note : Take extreme care not to damage the PCB when removing it.

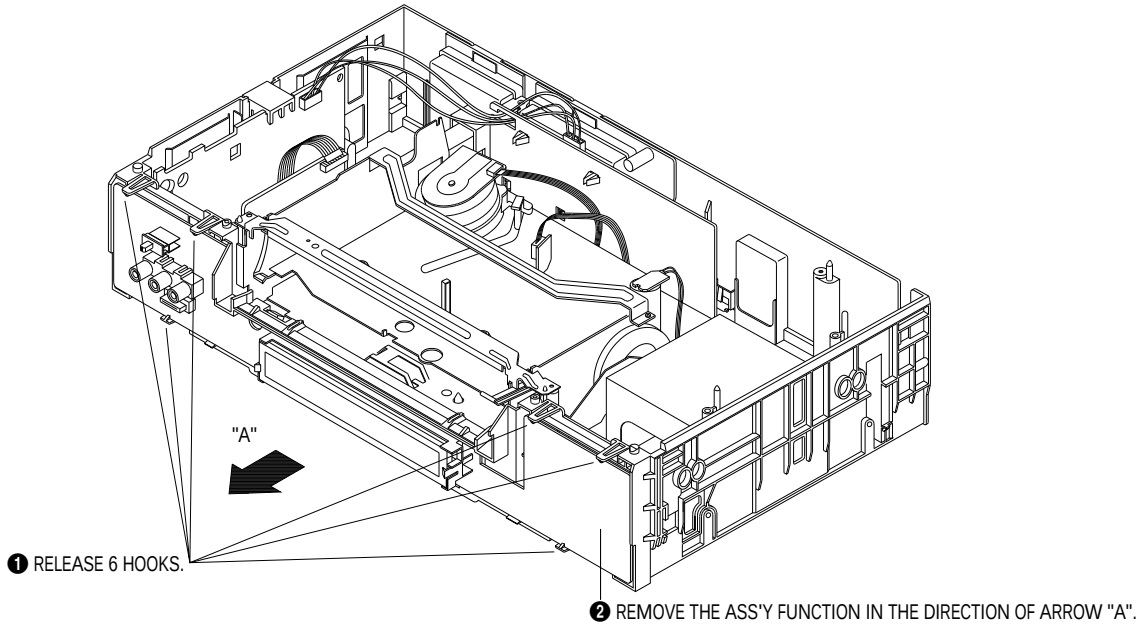


Fig. 4-4 Ass'y Timer removal

4-1-5 Ass'y Digital removal

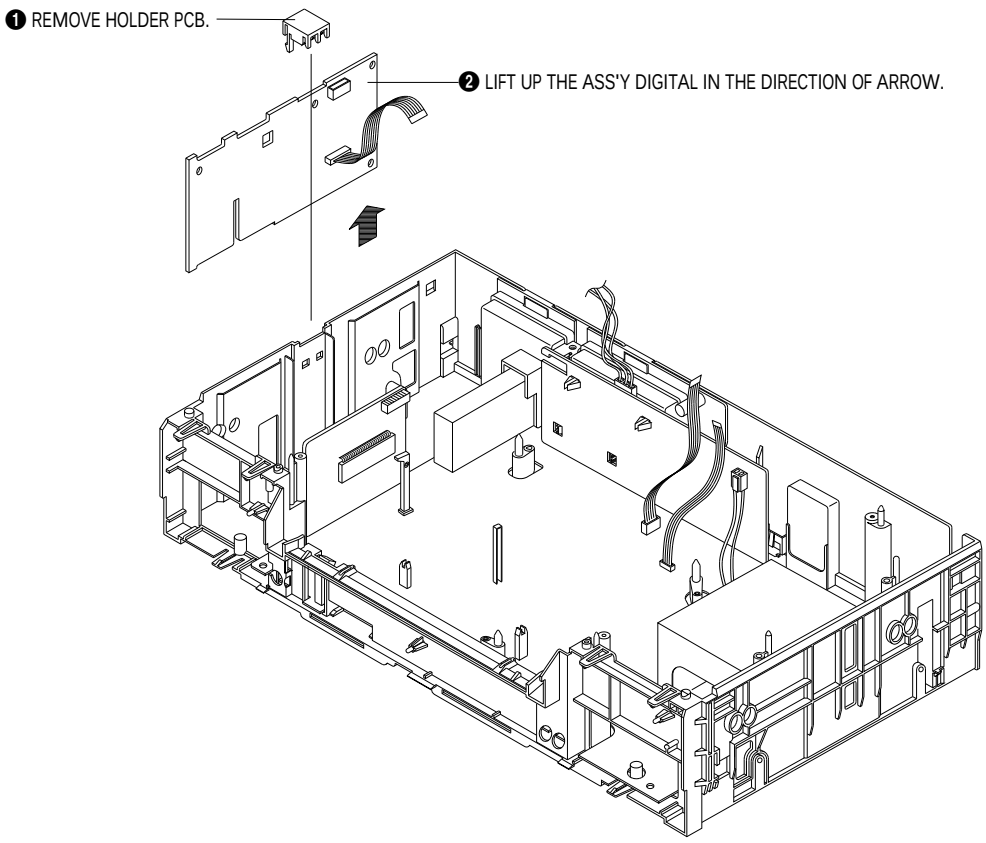


Fig. 4-5 Ass'y Digital removal

4-1-6 Chassis Unit removal

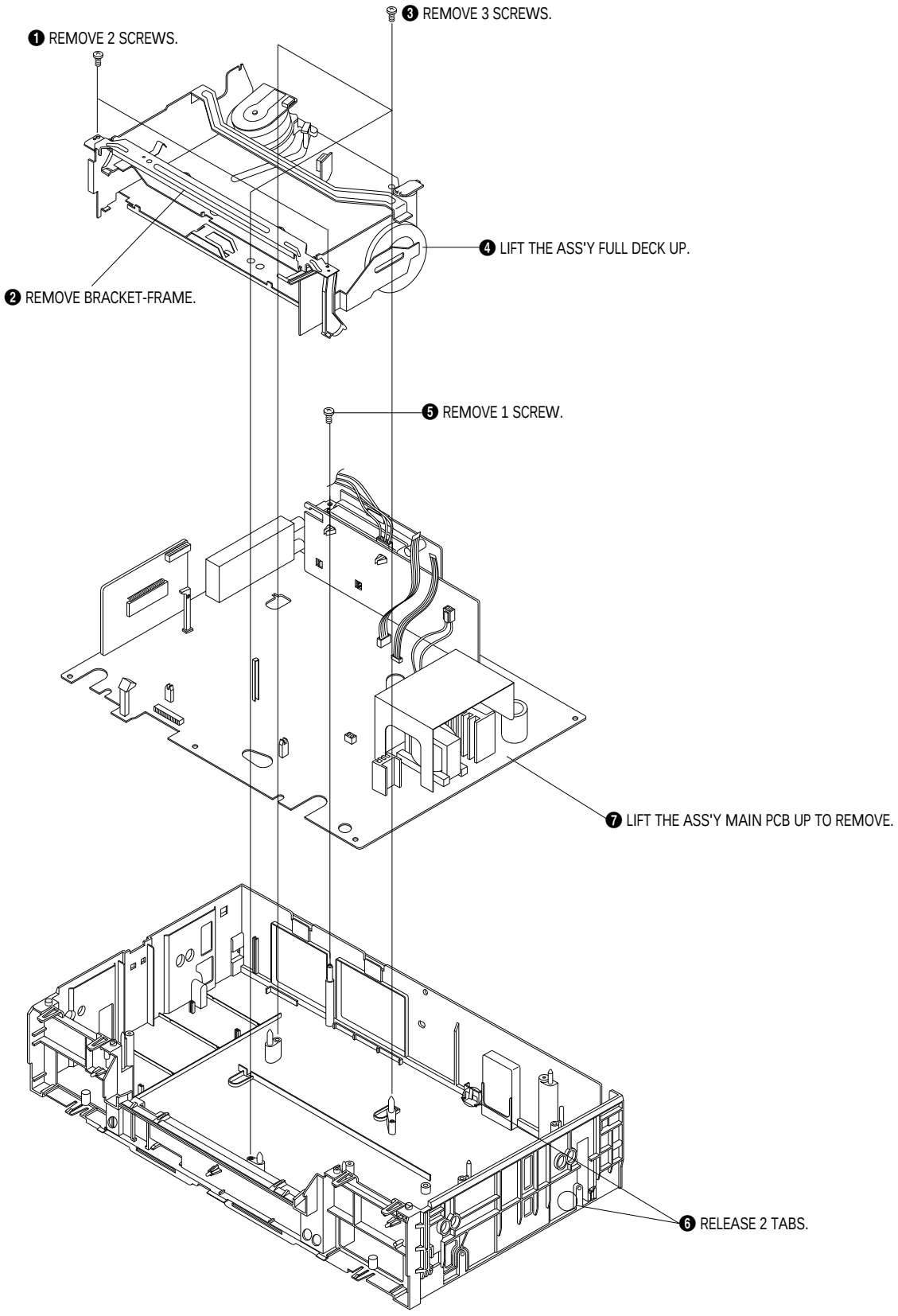

❶ REMOVE 2 SCREWS.
❷ REMOVE BRACKET-FRAME.
❸ REMOVE 3 SCREWS.
❹ LIFT THE ASS'Y FULL DECK UP.
❺ REMOVE 1 SCREW.
❻ RELEASE 2 TABS.
❼ LIFT THE ASS'Y MAIN PCB UP TO REMOVE.

Fig. 4-6 Chassis Unit removal

4-2 Circuit Board Locations

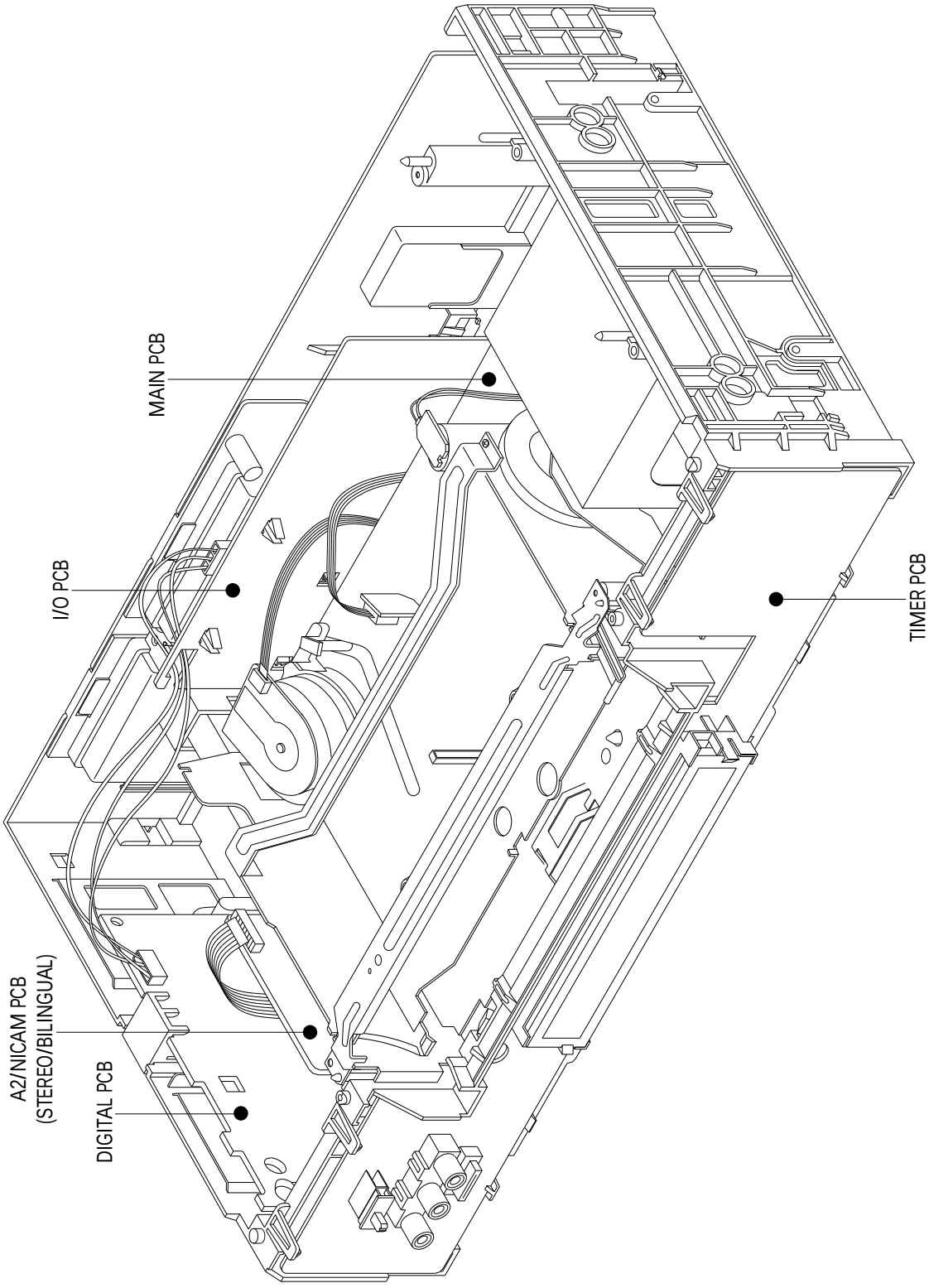
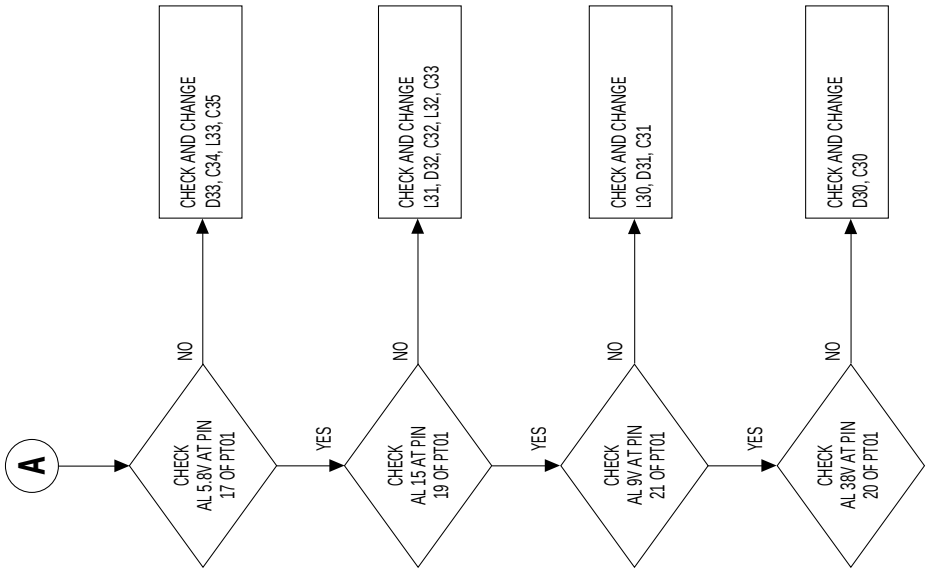
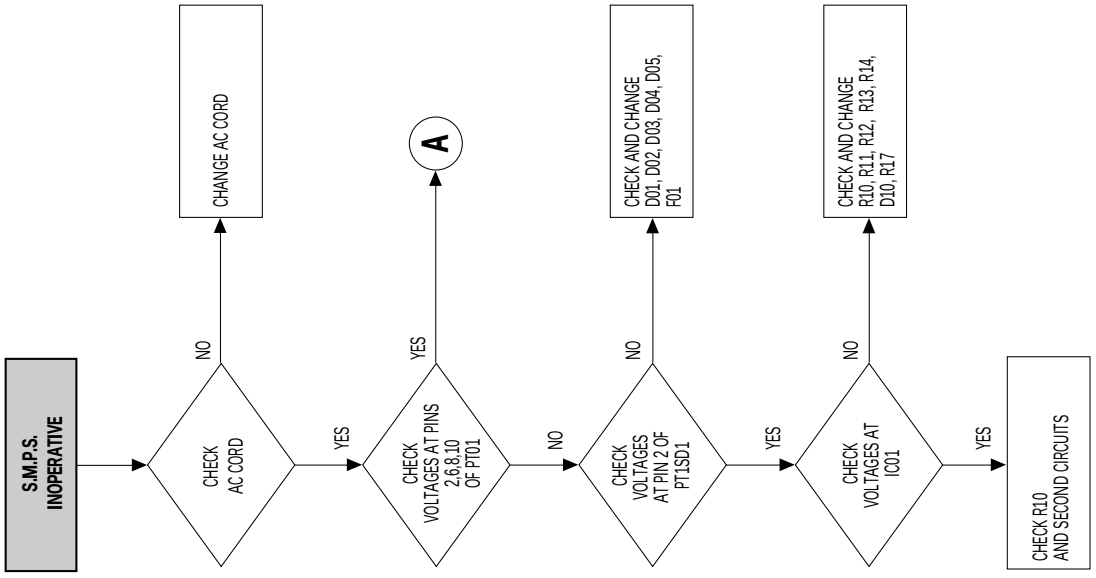
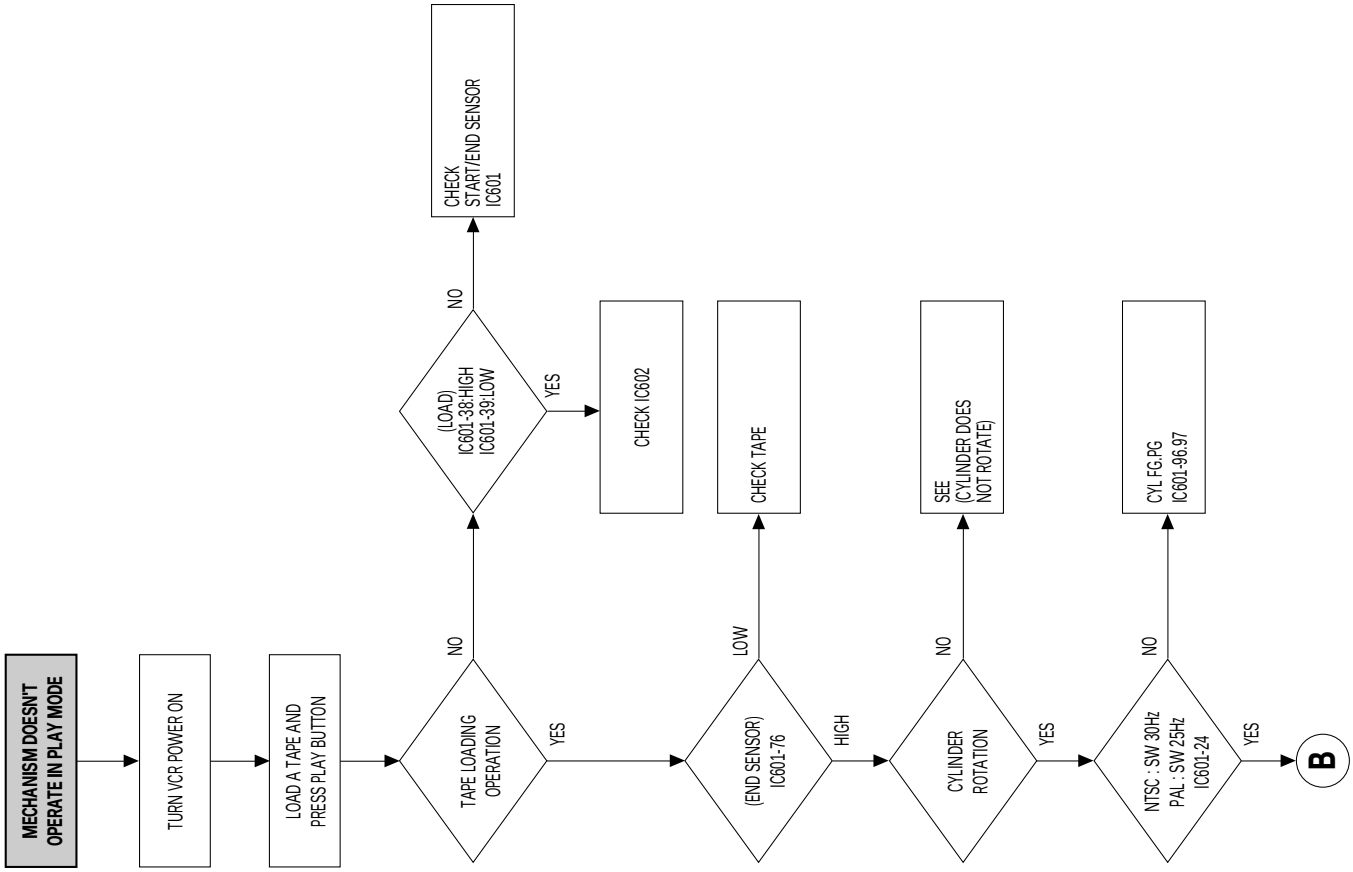


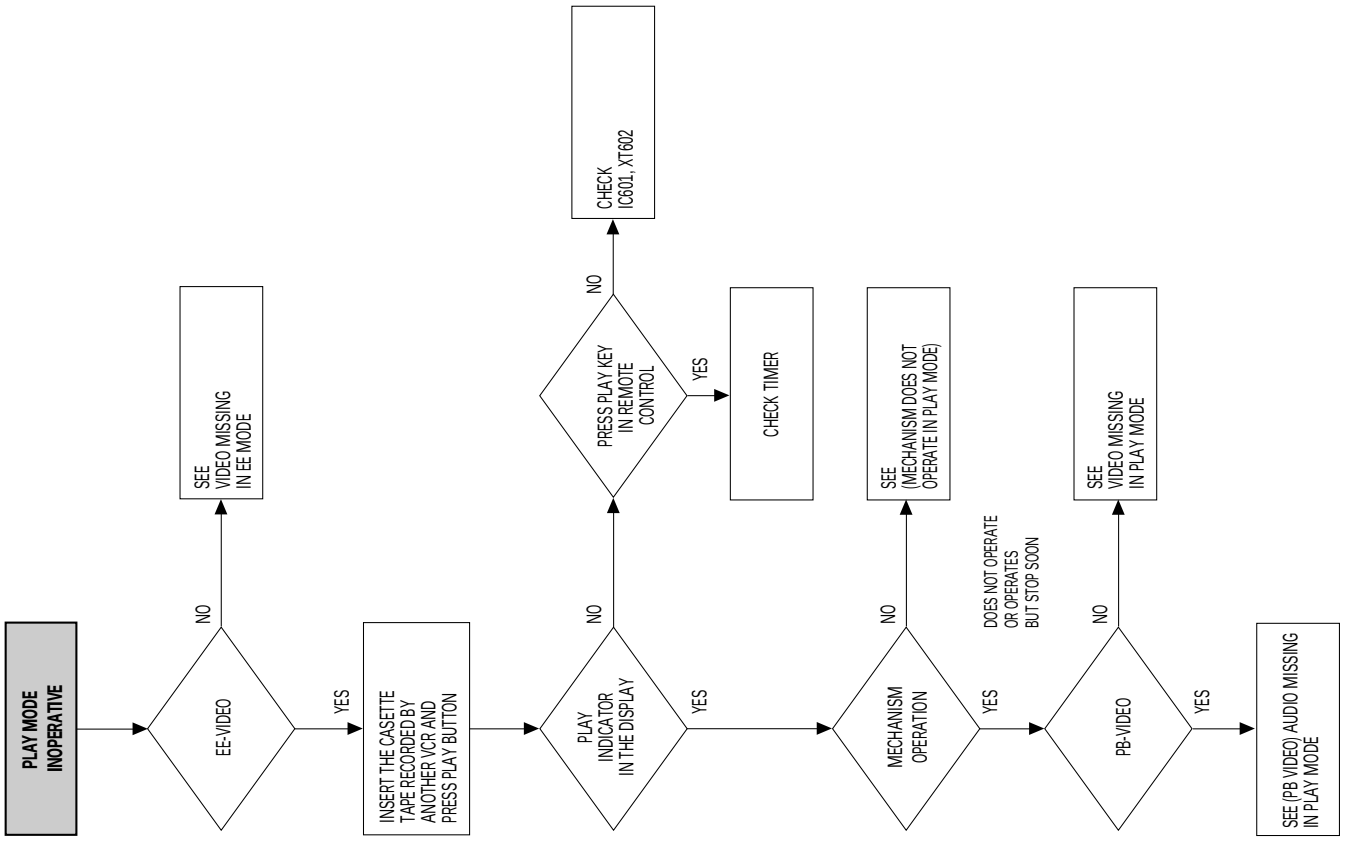
Fig. 4-7 Circuit Board Locations

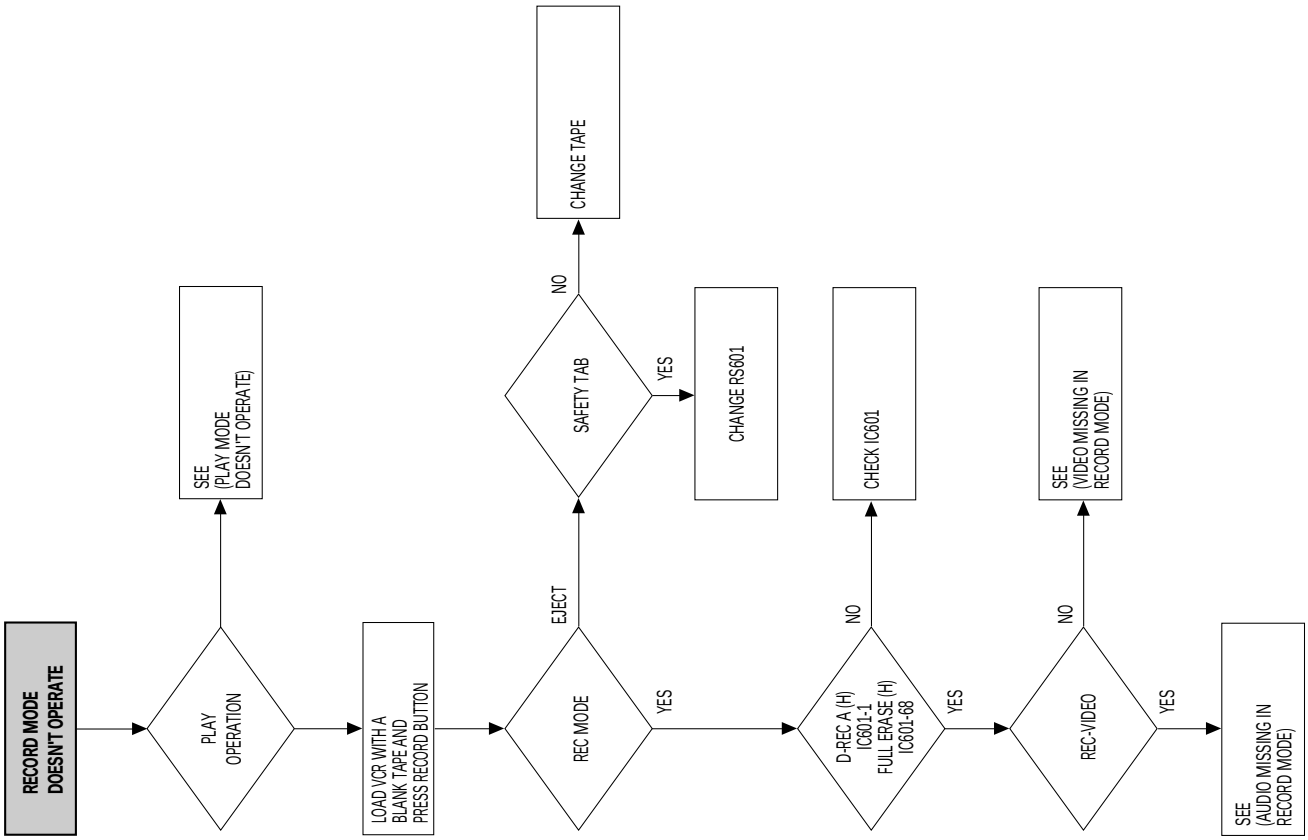
5. Troubleshooting

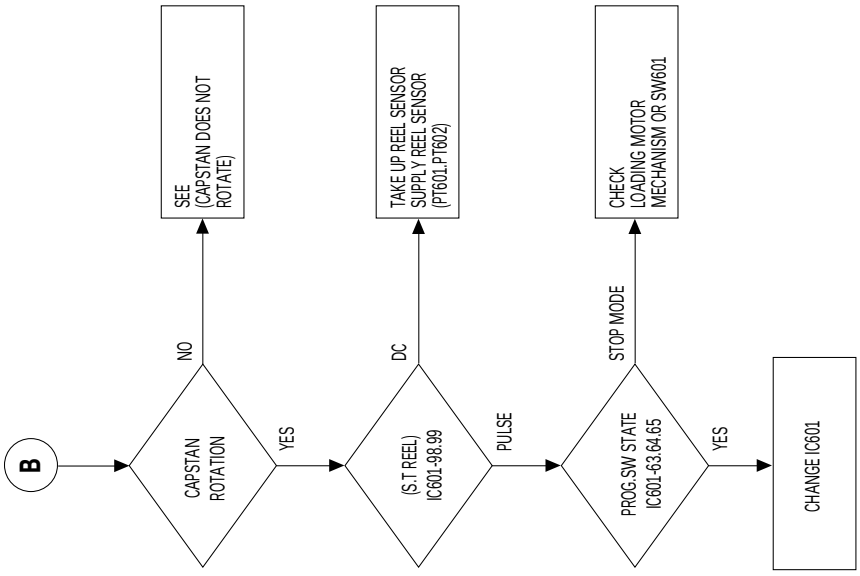


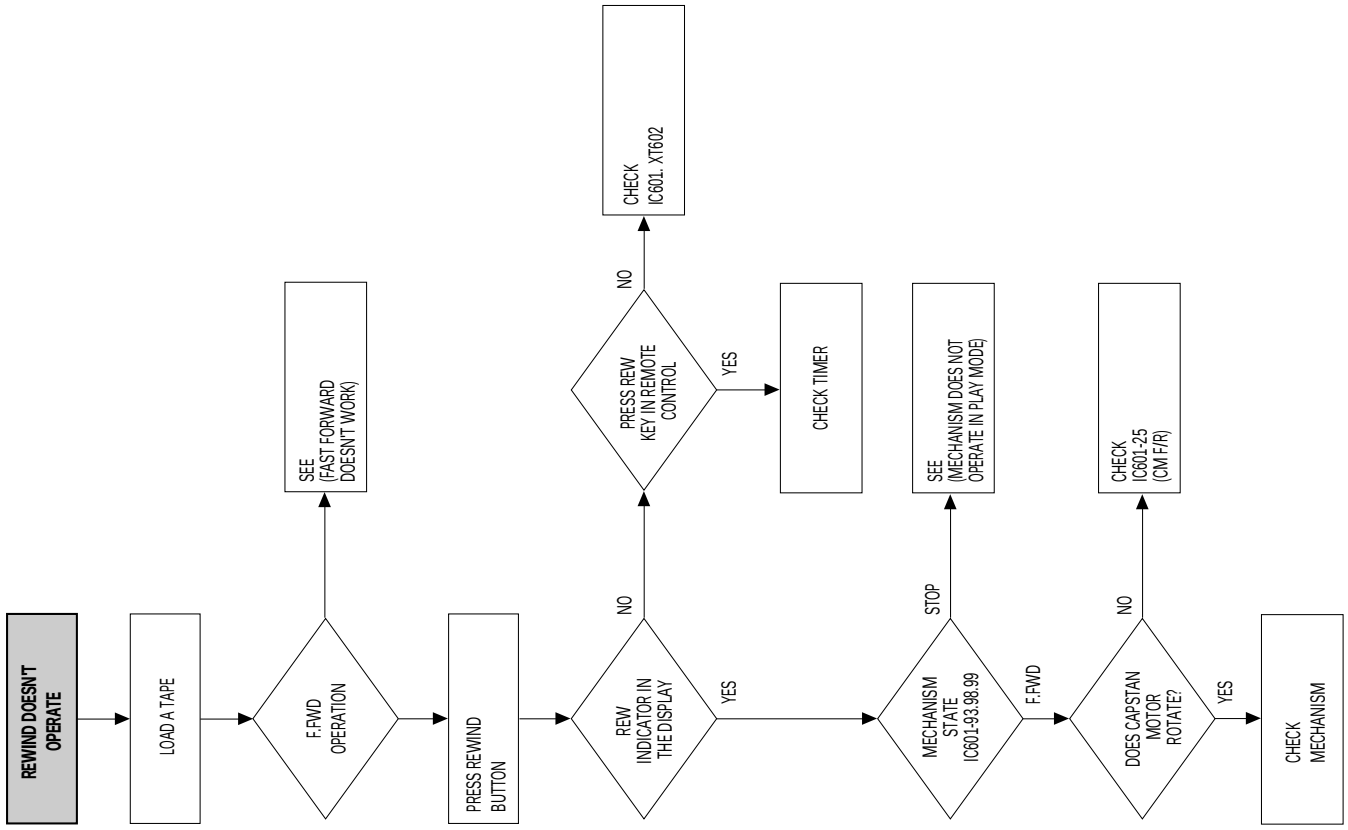


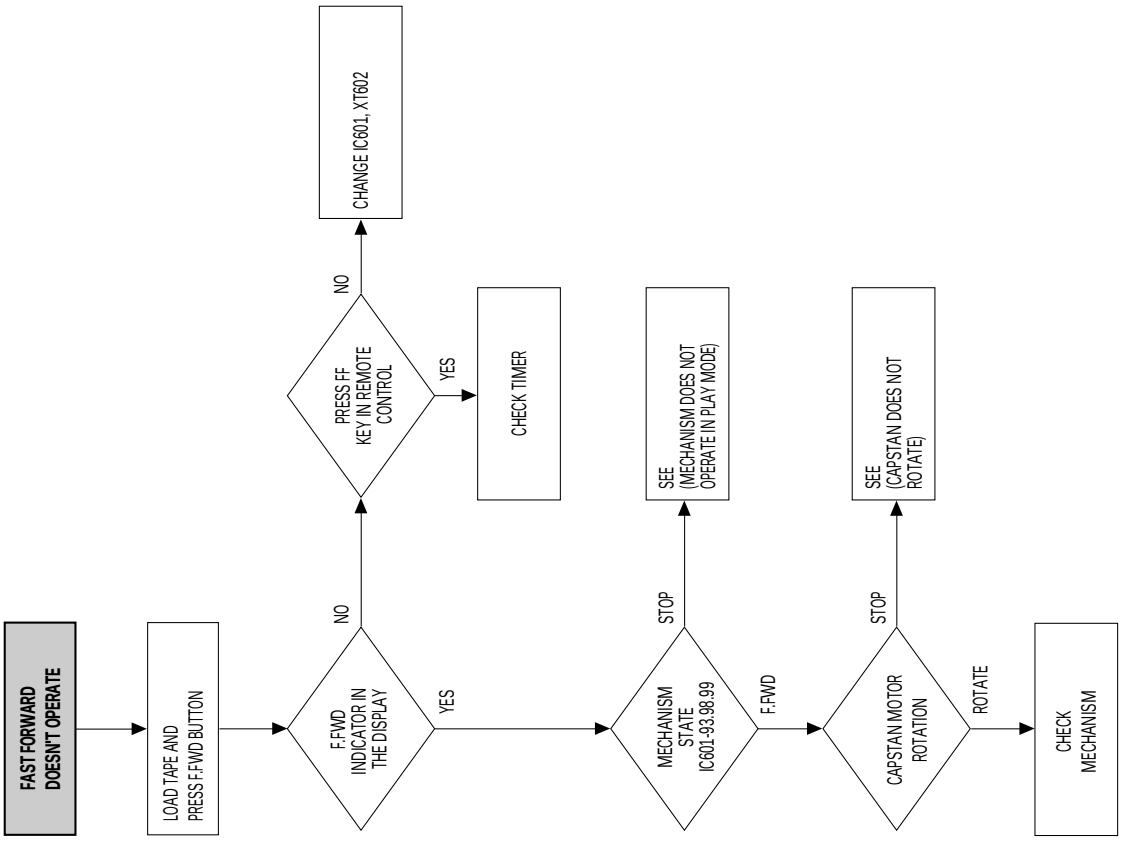

MECHANISM DOESN'T OPERATE IN PLAY MODE
TURN VCR POWER ON
LOAD A TAPE AND PRESS PLAY BUTTON
TAPE LOADING OPERATION
NO
YES
(LOAD) IC601-38:HIGH IC601-39:LOW
NO
YES
CHECK START/END SENSOR IC601
CHECK IC602
(END SENSOR) IC601-76
LOW
HIGH
CHECK TAPE
CYLINDER ROTATION
NO
YES
SEE (CYLINDER DOES NOT ROTATE)
NTSC : SW 30Hz PAL : SW 25Hz IC601-24
NO
YES
CYL FG,PG IC601-96,97
B

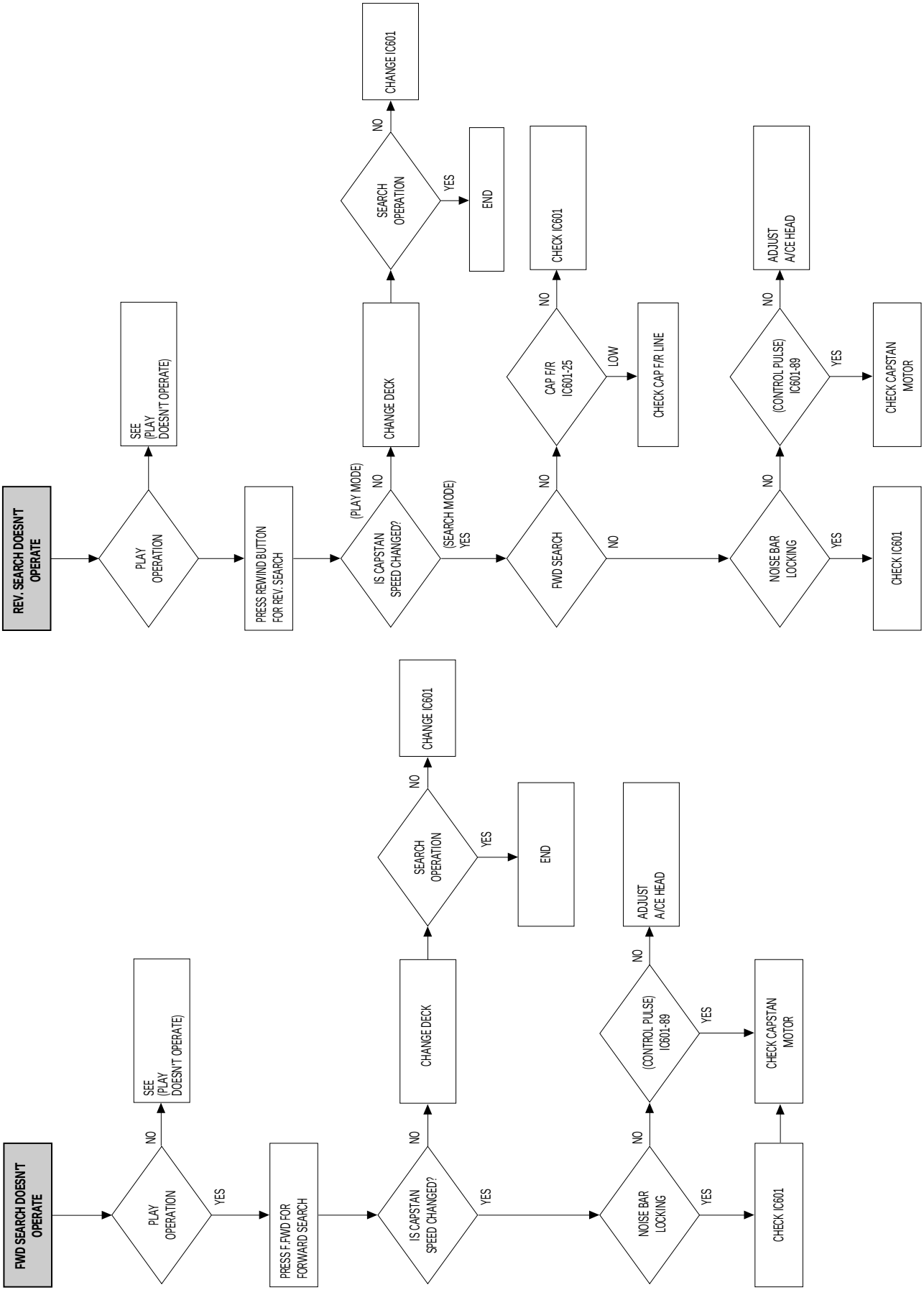

PLAY MODE INOPERATIVE
EE-VIDEO
NO
YES
SEE VIDEO MISSING IN EE MODE
INSERT THE CASETTE TAPE RECORDED BY ANOTHER VCR AND PRESS PLAY BUTTON
PLAY INDICATOR IN THE DISPLAY
NO
YES
PRESS PLAY KEY IN REMOTE CONTROL
NO
YES
CHECK IC601, XT602
CHECK TIMER
MECHANISM OPERATION
NO
YES
SEE (MECHANISM DOES NOT OPERATE IN PLAY MODE)
DOES NOT OPERATE OR OPERATES BUT STOP SOON
PB-VIDEO
NO
YES
SEE VIDEO MISSING IN PLAY MODE
SEE (PB VIDEO) AUDIO MISSING IN PLAY MODE

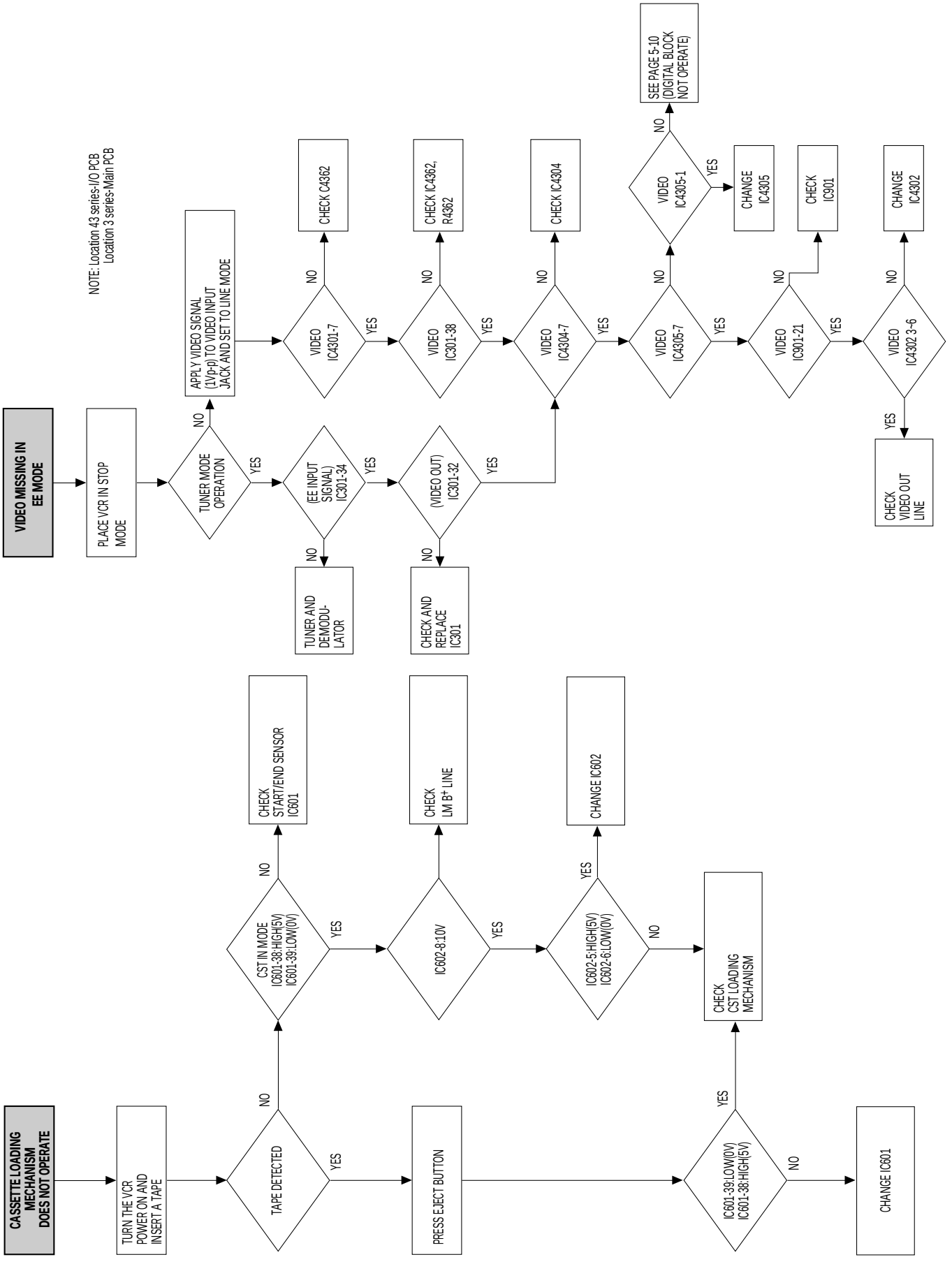

RECORD MODE DOESN'T OPERATE
PLAY OPERATION
SEE (PLAY MODE DOESN'T OPERATE)
LOAD VCR WITH A BLANK TAPE AND PRESS RECORD BUTTON
REC MODE
EJECT
SAFETY TAB
YES
CHANGE RS601
NO
CHANGE TAPE
YES
D-REC A (H) IC601-1 FULL ERASE (H) IC601-68
NO
CHECK IC601
YES
REC-VIDEO
NO
SEE (VIDEO MISSING IN RECORD MODE)
YES
SEE (AUDIO MISSING IN RECORD MODE)

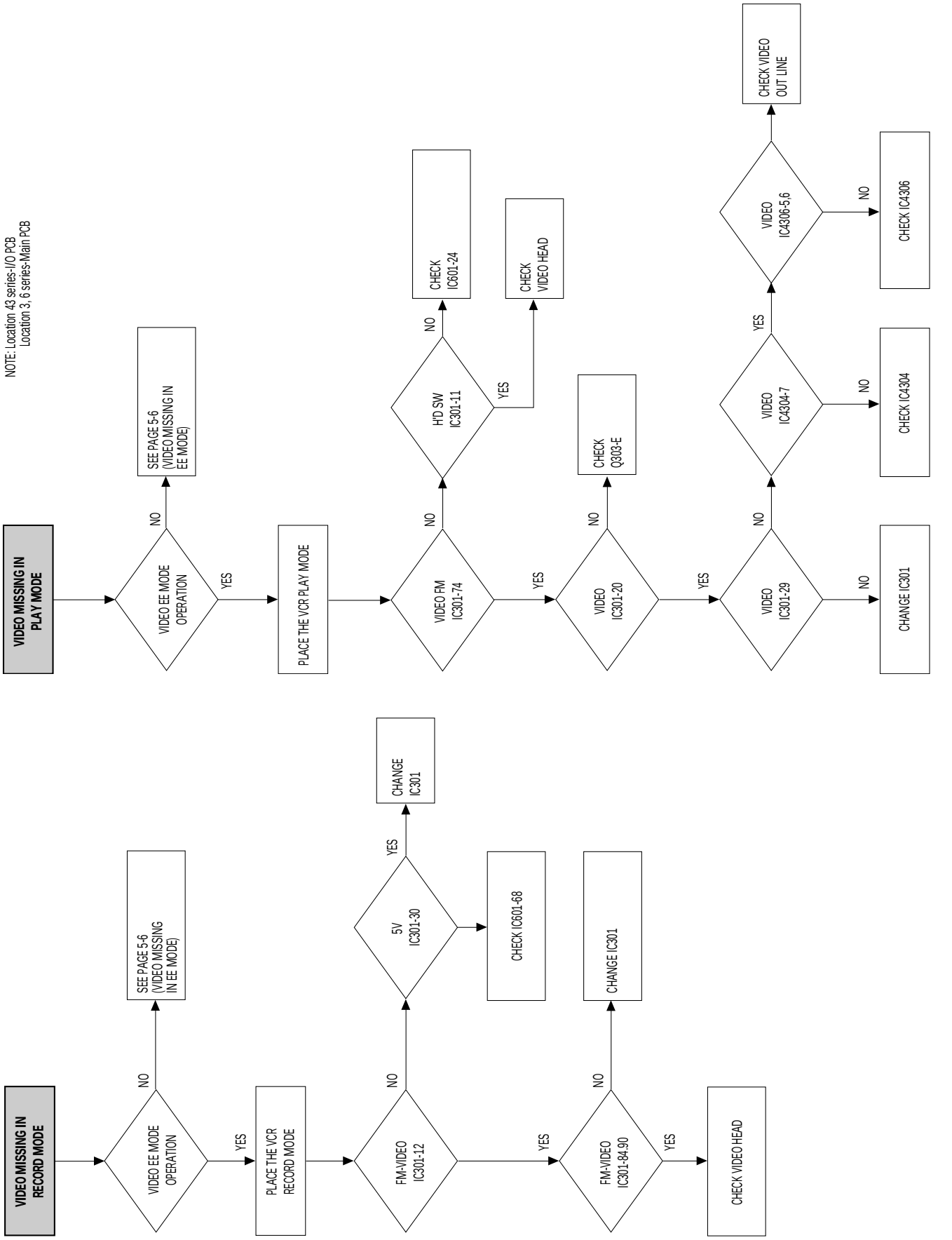

B
CAPSTAN ROTATION
NO
SEE (CAPSTAN DOES NOT ROTATE)
YES
(S.T REEL) IC601-98.99
DC
TAKE UP REEL SENSOR SUPPLY REEL SENSOR (PT601,PT602)
PULSE
PROG.SW STATE IC601-63.64.65
STOP MODE
CHECK LOADING MOTOR MECHANISM OR SW601
YES
CHANGE IC601

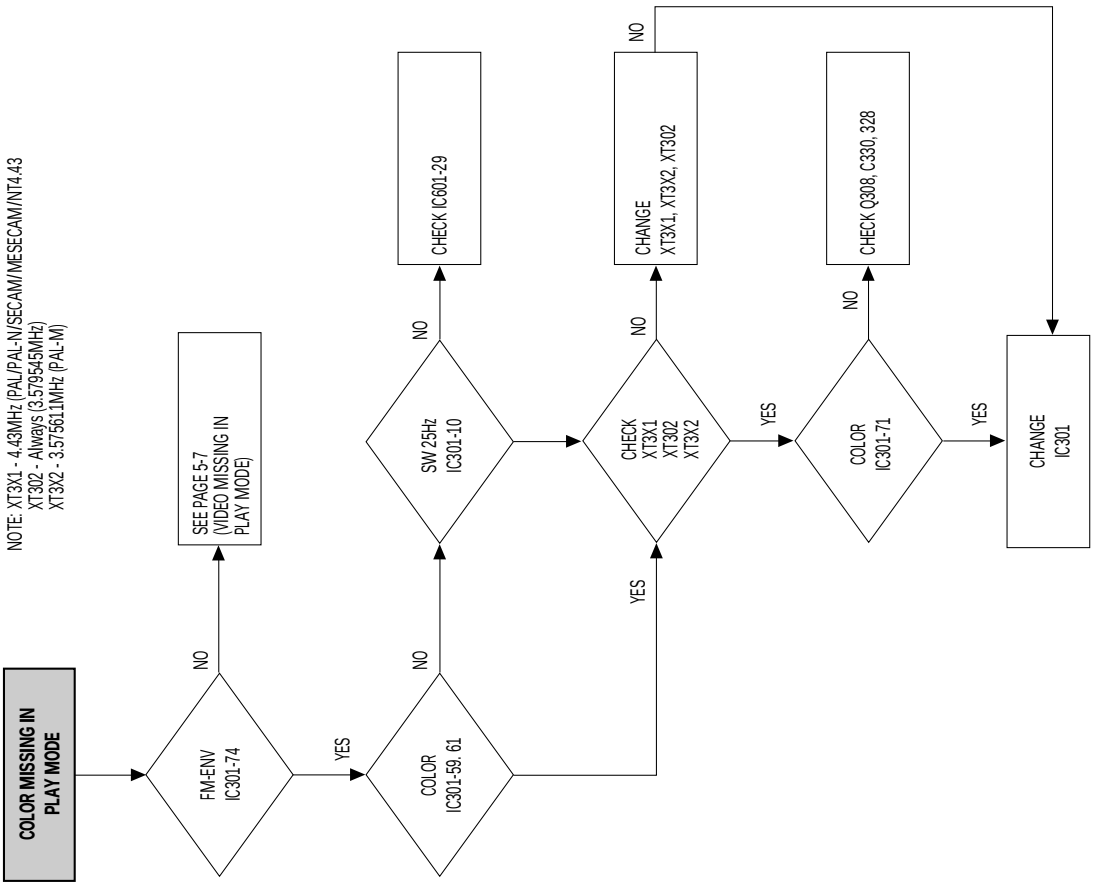

REWIND DOESN'T OPERATE
LOAD A TAPE
F.FWD OPERATION
SEE (FAST FORWARD DOESN'T WORK)
PRESS REWIND BUTTON
REW INDICATOR IN THE DISPLAY
NO
CHECK IC601. XT602
PRESS REW KEY IN REMOTE CONTROL
YES
CHECK TIMER
MECHANISM STATE IC601-93.98.99
STOP
SEE (MECHANISM DOES NOT OPERATE IN PLAY MODE)
F.FWD
DOES CAPSTAN MOTOR ROTATE?
NO
CHECK IC601-25 (CM F/R)
YES
CHECK MECHANISM

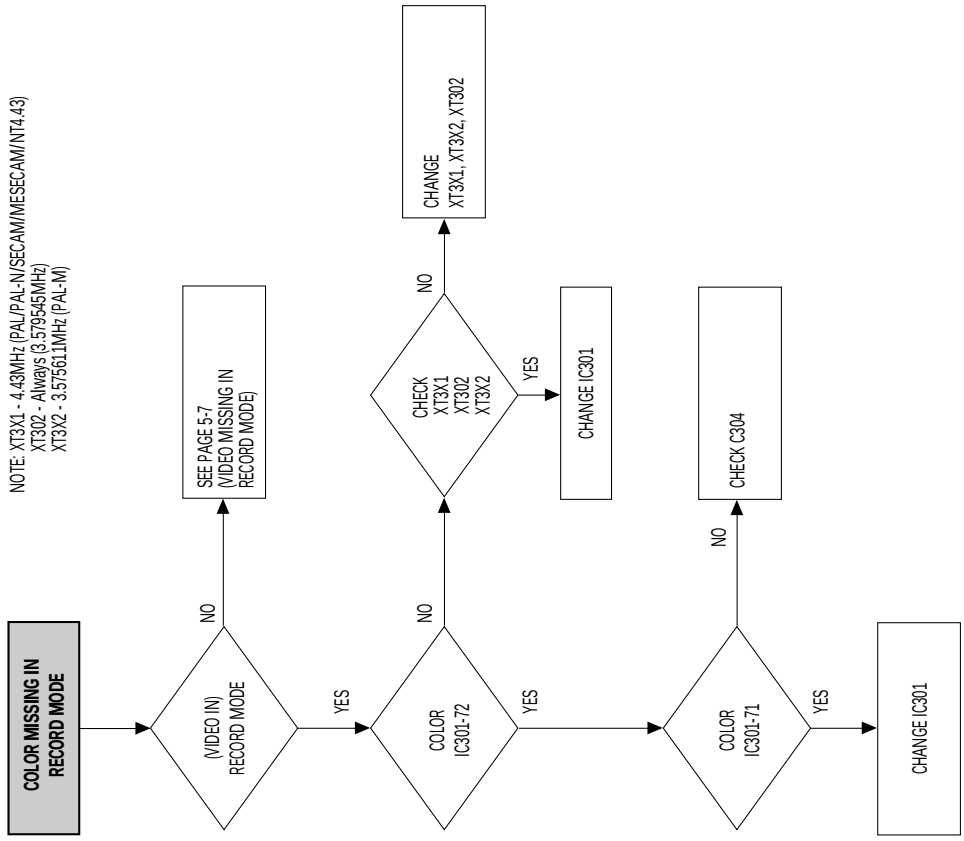

FAST FORWARD DOESN'T OPERATE
LOAD TAPE AND PRESS F.FWD BUTTON
F.FWD INDICATOR IN THE DISPLAY
NO
CHANGE IC601, XT602
PRESS FF KEY IN REMOTE CONTROL
YES
CHECK TIMER
YES
MECHANISM STATE IC601-93.98.99
STOP
SEE (MECHANISM DOES NOT OPERATE IN PLAY MODE)
F.FWD
CAPSTAN MOTOR ROTATION
STOP
SEE (CAPSTAN DOES NOT ROTATE)
ROTATE
CHECK MECHANISM

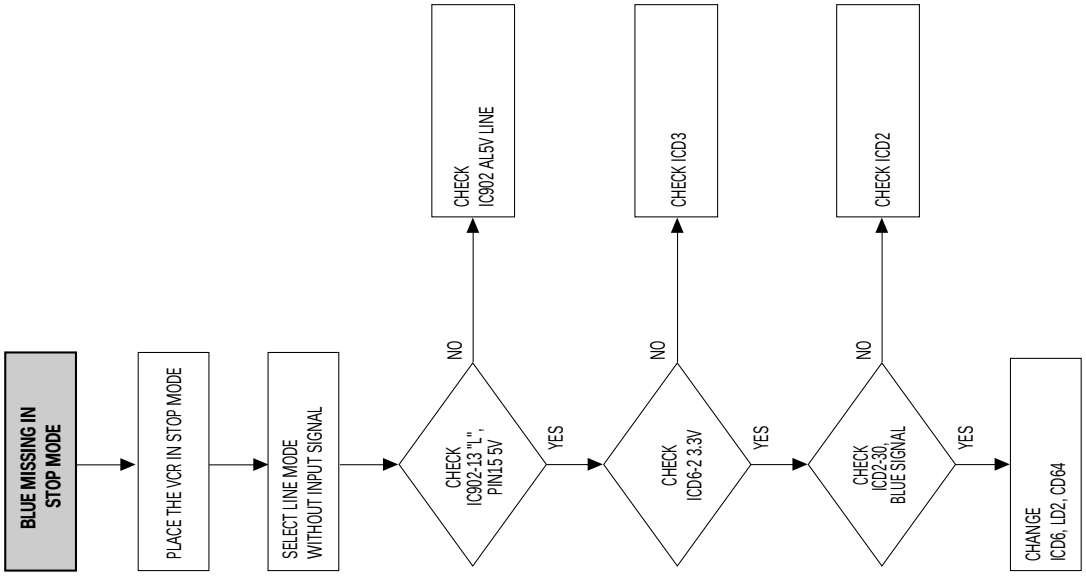

REV. SEARCH DOESN'T OPERATE
PLAY OPERATION
NO
SEE (PLAY DOESN'T OPERATE)
YES
PRESS REWIND BUTTON FOR REV. SEARCH
IS CAPSTAN SPEED CHANGED?
(PLAY MODE)
NO
CHANGE DECK
(SEARCH MODE)
YES
SEARCH OPERATION
NO
CHANGE IC601
YES
END
FWD SEARCH
NO
CAP F/R IC601-25
NO
CHECK IC601
LOW
CHECK CAP F/R LINE
NOISE BAR LOCKING
NO
(CONTROL PULSE) IC601-89
NO
ADJUST A/CE HEAD
YES
CHECK IC601
YES
CHECK CAPSTAN MOTOR
FWD SEARCH DOESN'T OPERATE
PLAY OPERATION
NO
SEE (PLAY DOESN'T OPERATE)
YES
PRESS F.FWD FOR FORWARD SEARCH
IS CAPSTAN SPEED CHANGED?
NO
CHANGE DECK
YES
SEARCH OPERATION
NO
CHANGE IC601
YES
END
NOISE BAR LOCKING
NO
(CONTROL PULSE) IC601-89
NO
ADJUST A/CE HEAD
YES
CHECK CAPSTAN MOTOR
YES
CHECK IC601

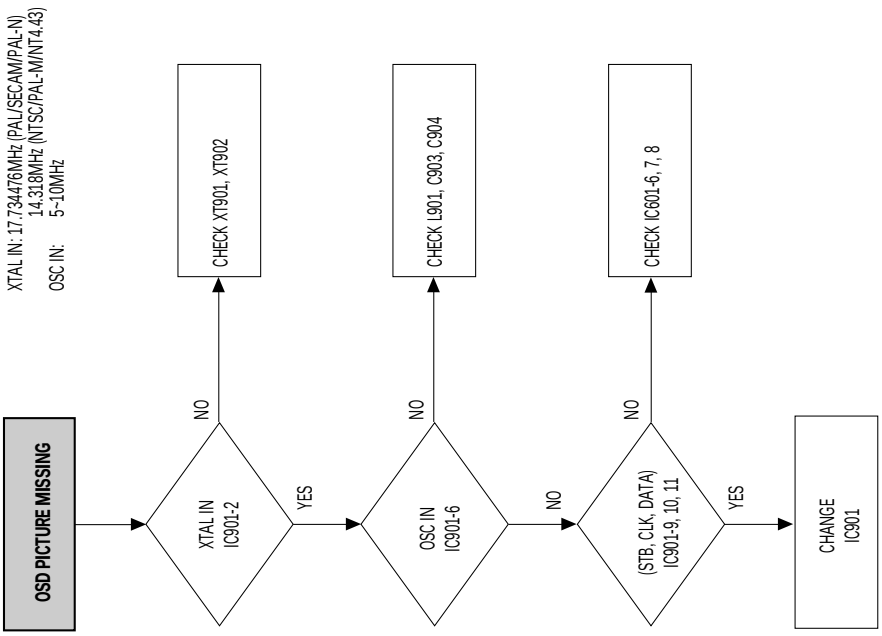

VIDEO MISSING IN EE MODE
PLACE VCR IN STOP MODE
TUNER MODE OPERATION
NO
YES
APPLY VIDEO SIGNAL (1Vp-p) TO VIDEO INPUT JACK AND SET TO LINE MODE
NOTE: Location 43 series-I/O PCB
Location 3 series-Main PCB
(EE INPUT SIGNAL) IC301-34
TUNER AND DEMODU-LATOR
(VIDEO OUT) IC301-32
CHECK AND REPLACE IC301
VIDEO IC4301-7
CHECK C4362
VIDEO IC301-38
CHECK IC4362, R4362
VIDEO IC4304-7
CHECK IC4304
VIDEO IC4305-7
VIDEO IC4305-1
SEE PAGE 5-10 (DIGITAL BLOCK NOT OPERATE)
CHANGE IC4305
VIDEO IC901-21
CHECK IC901
VIDEO IC4302 3~6
CHANGE IC4302
CHECK VIDEO OUT LINE
CASSETTE LOADING MECHANISM DOES NOT OPERATE
TURN THE VCR POWER ON AND INSERT A TAPE
TAPE DETECTED
CST IN MODE IC601-38:HIGH(5V) IC601-39:LOW(0V)
CHECK START/END SENSOR IC601
IC602-8:10V
CHECK LM B+ LINE
IC602-5:HIGH(5V) IC602-6:LOW(0V)
CHANGE IC602
CHECK CST LOADING MECHANISM
PRESS EJECT BUTTON
IC601-39:LOW(0V) IC601-38:HIGH(5V)
CHANGE IC601

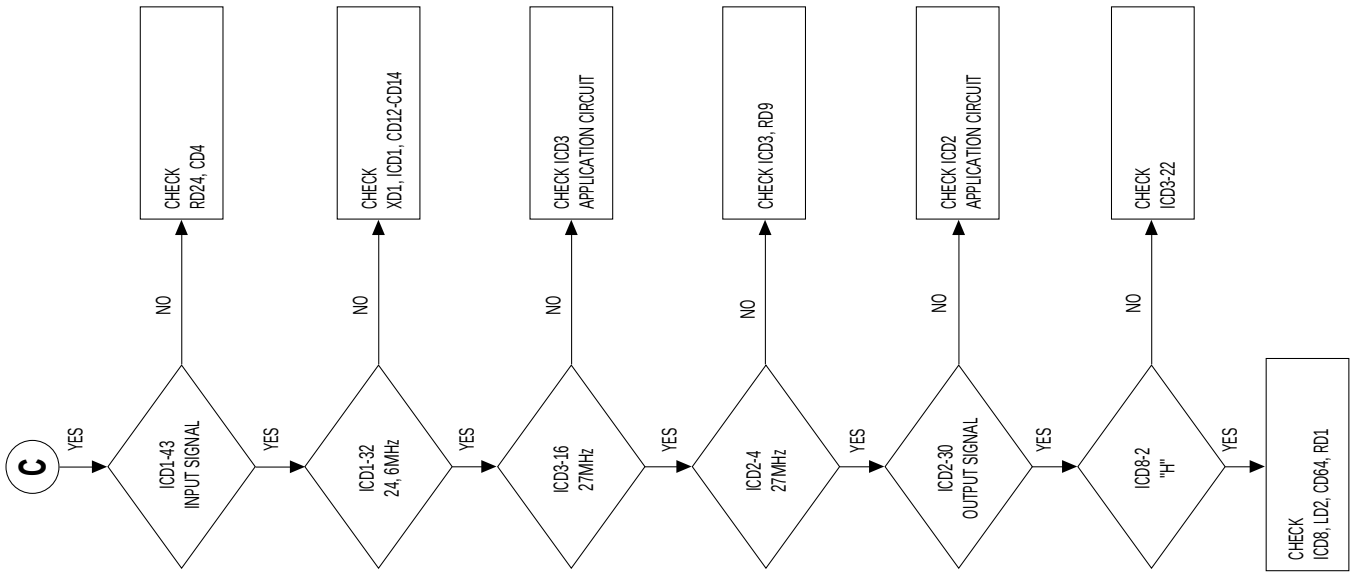

NOTE: Location 43 series-I/O PCB
Location 3, 6 series-Main PCB
VIDEO MISSING IN PLAY MODE
VIDEO EE MODE OPERATION
NO
SEE PAGE 5-6 (VIDEO MISSING IN EE MODE)
YES
PLACE THE VCR PLAY MODE
VIDEO FM IC301-74
NO
CHECK IC601-24
YES
H'D SW IC301-11
NO
CHECK VIDEO HEAD
YES
VIDEO IC301-20
NO
CHECK Q303-E
YES
VIDEO IC301-29
NO
CHANGE IC301
YES
VIDEO IC4304-7
NO
CHECK IC4304
YES
VIDEO IC4306-5,6
NO
CHECK IC4306
YES
CHECK VIDEO OUT LINE
VIDEO MISSING IN RECORD MODE
VIDEO EE MODE OPERATION
NO
SEE PAGE 5-6 (VIDEO MISSING IN EE MODE)
YES
PLACE THE VCR RECORD MODE
FM-VIDEO IC301-12
NO
CHECK IC601-68
YES
5V IC301-30
NO
CHANGE IC301
YES
FM-VIDEO IC301-84,90
NO
CHECK VIDEO HEAD
YES

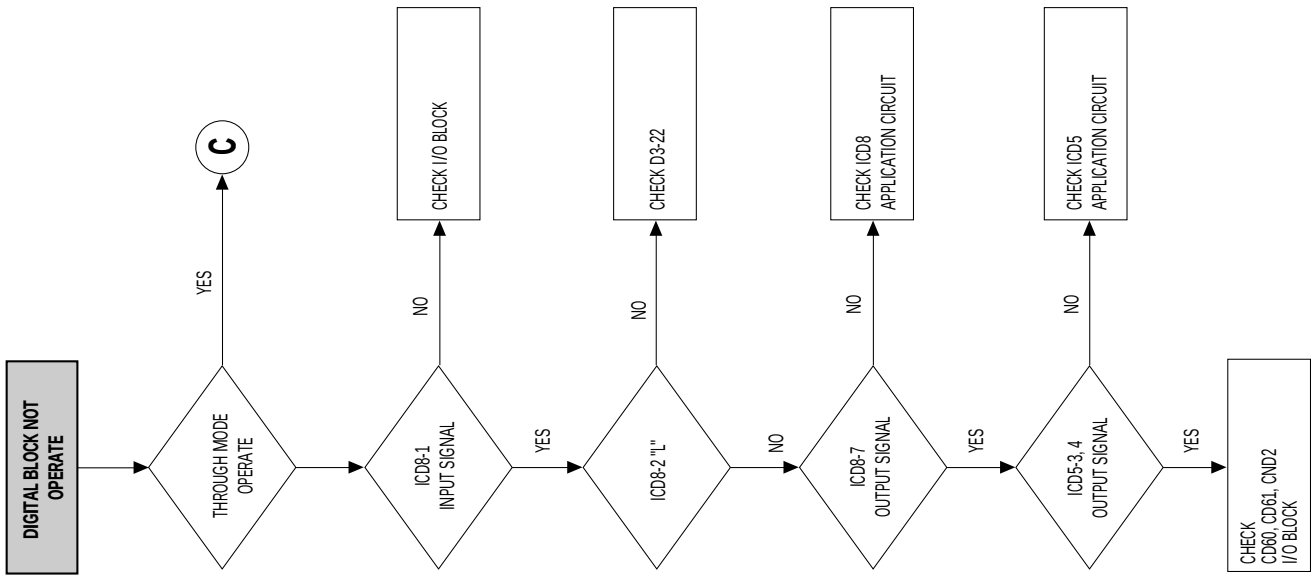

COLOR MISSING IN PLAY MODE
NOTE: XT3X1 - 4.43MHz (PAL/PAL-N/SECAM/MESECAM/NT4.43
XT302 - Always (3.579545MHz)
XT3X2 - 3.575611MHz (PAL-M)
FM-ENV IC301-74
NO
SEE PAGE 5-7 (VIDEO MISSING IN PLAY MODE)
YES
COLOR IC301-59, 61
NO
SW 25Hz IC301-10
NO
CHECK IC601-29
YES
CHECK XT3X1 XT302 XT3X2
NO
CHANGE XT3X1, XT3X2, XT302
YES
COLOR IC301-71
NO
CHECK Q308, C330, 328
YES
CHANGE IC301

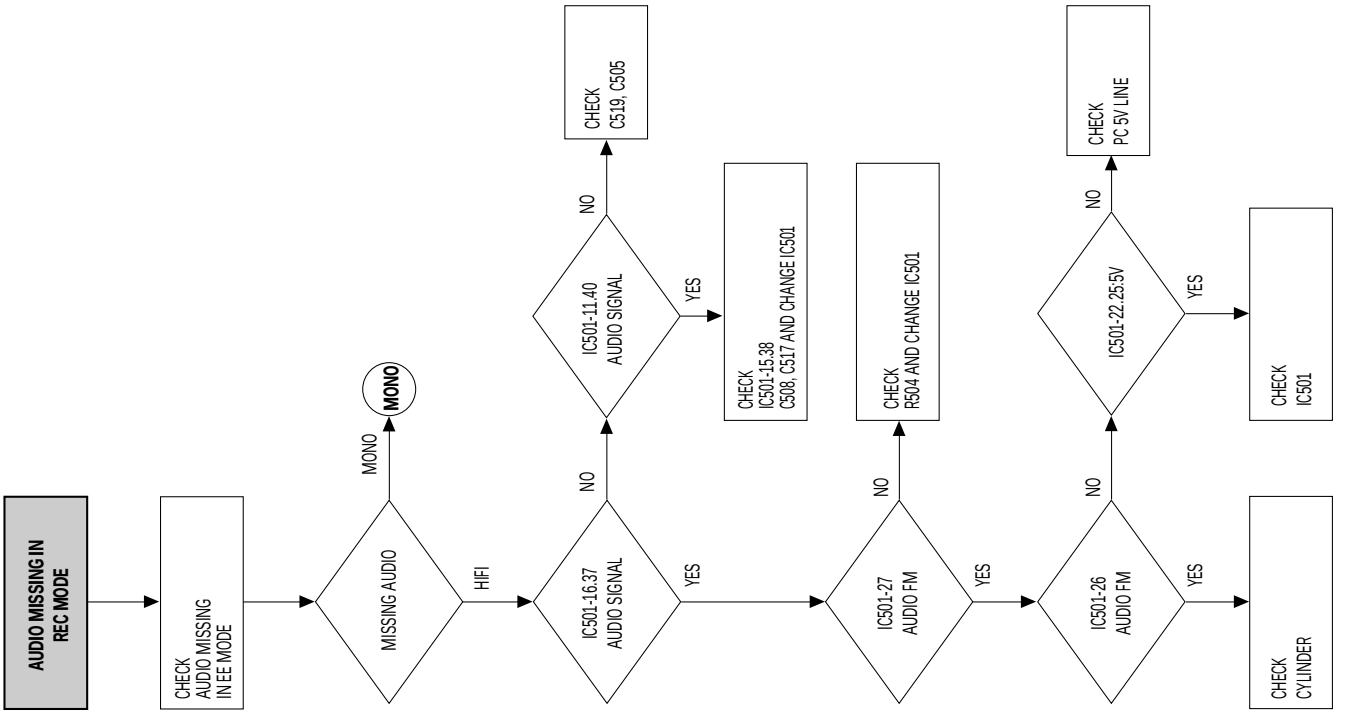

COLOR MISSING IN RECORD MODE
NOTE: XT3X1 - 4.43MHz (PAL/PAL-N/SECAM/MESECAM/NT4.43)
XT302 - Always (3.579545MHz)
XT3X2 - 3.575611MHz (PAL-M)
(VIDEO IN) RECORD MODE
NO
SEE PAGE 5-7 (VIDEO MISSING IN RECORD MODE)
YES
COLOR IC301-72
NO
CHECK XT3X1 XT302 XT3X2
NO
CHANGE XT3X1, XT3X2, XT302
YES
CHANGE IC301
YES
COLOR IC301-71
NO
CHECK C304
YES
CHANGE IC301

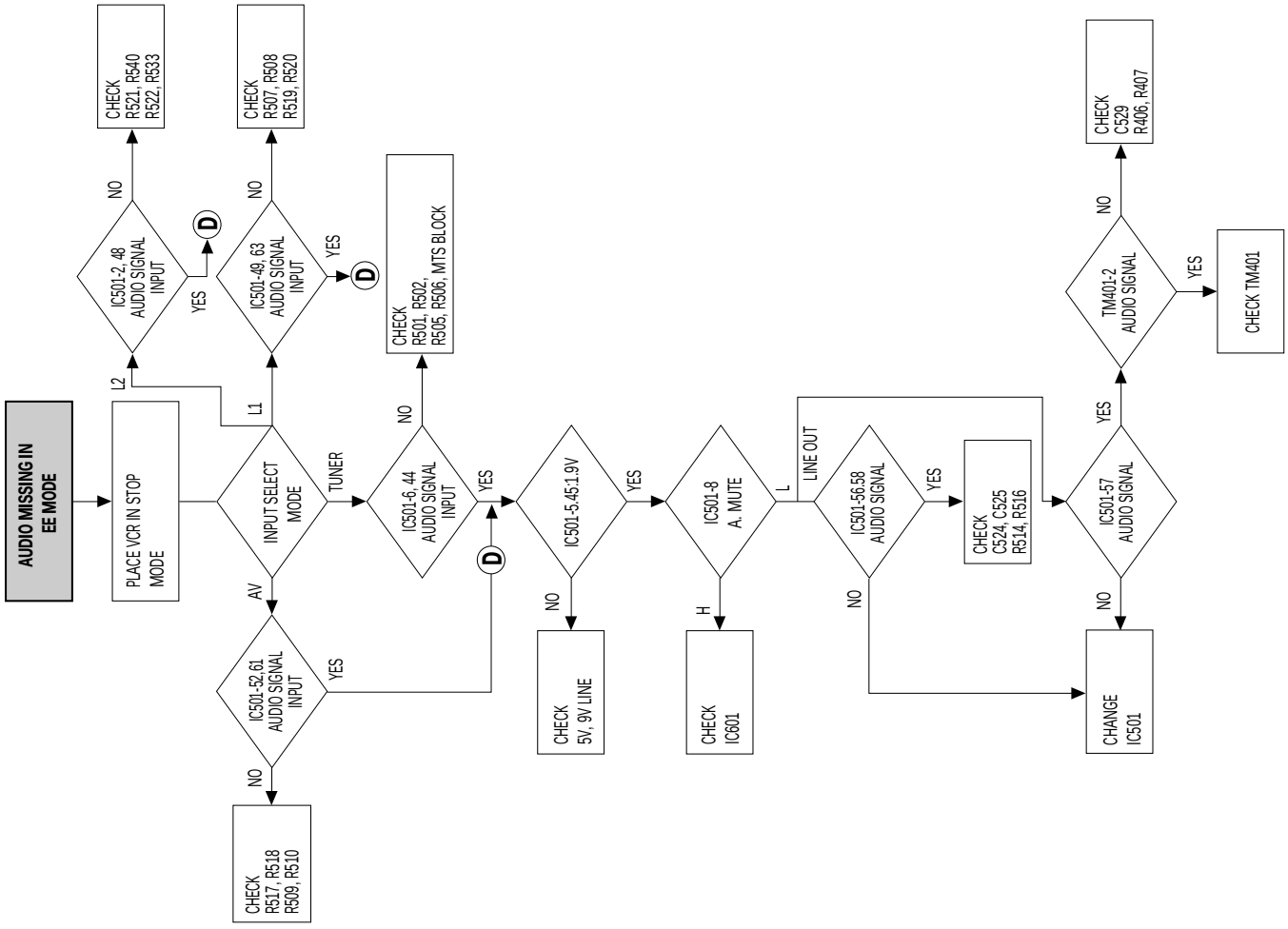

BLUE MISSING IN STOP MODE
PLACE THE VCR IN STOP MODE
SELECT LINE MODE WITHOUT INPUT SIGNAL
CHECK IC902-13 "L", PIN15 5V
NO
YES
CHECK IC902 AL5V LINE
CHECK ICD6-2 3.3V
NO
YES
CHECK ICD3
CHECK ICD2:30, BLUE SIGNAL
NO
YES
CHECK ICD2
CHANGE ICD6, LD2, CD64

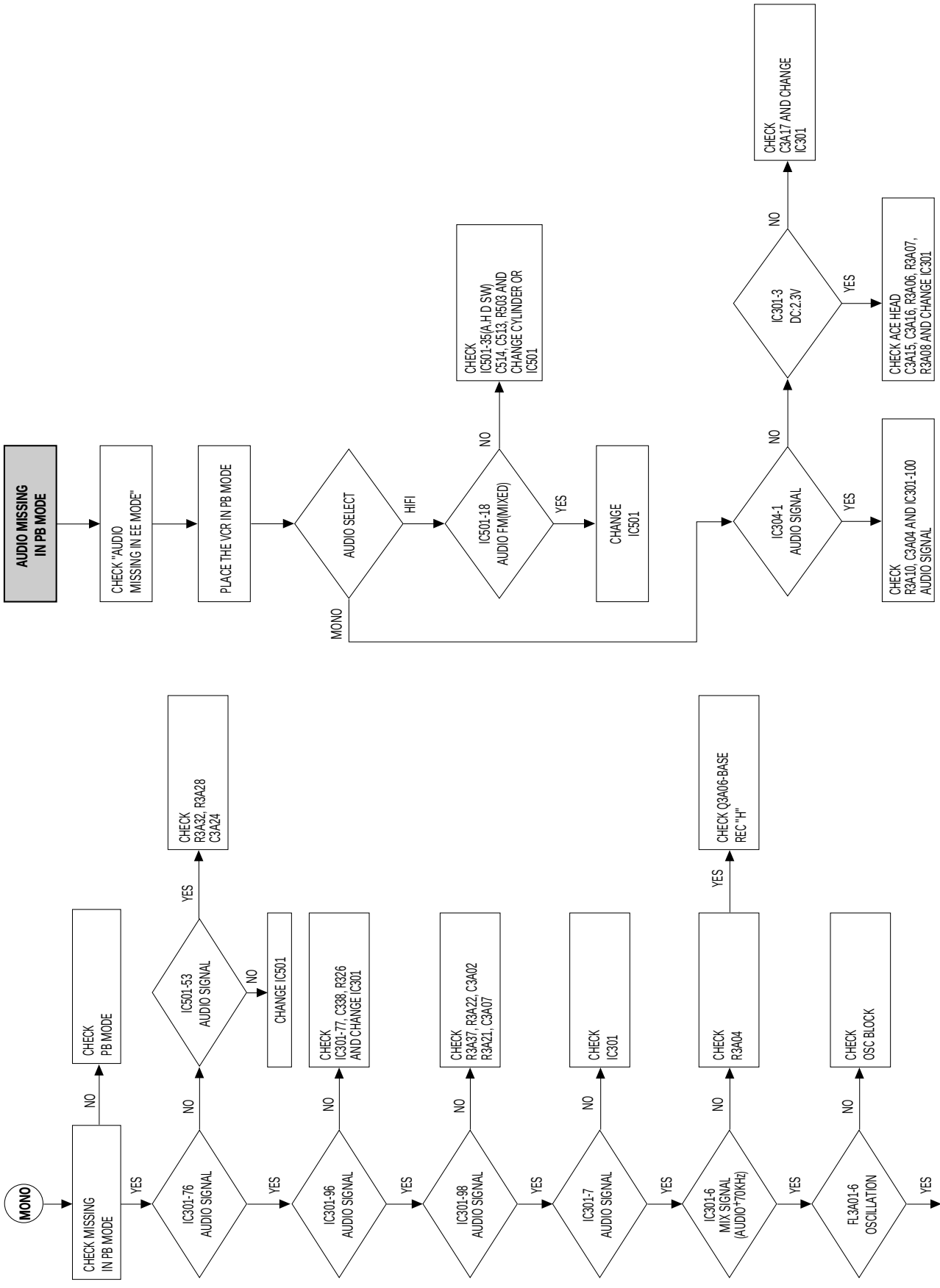

XTAL IN: 17.734476MHz (PAL/SECAM/PAL-N)
14.318MHz (NTSC/PAL-M/NT4.43)
OSC IN: 5~10MHz
OSD PICTURE MISSING
XTAL IN IC901-2
NO
CHECK XT901, XT902
YES
OSC IN IC901-6
NO
CHECK L901, C903, C904
NO
(STB, CLK, DATA) IC901-9, 10, 11
NO
CHECK IC601-6, 7, 8
YES
CHANGE IC901

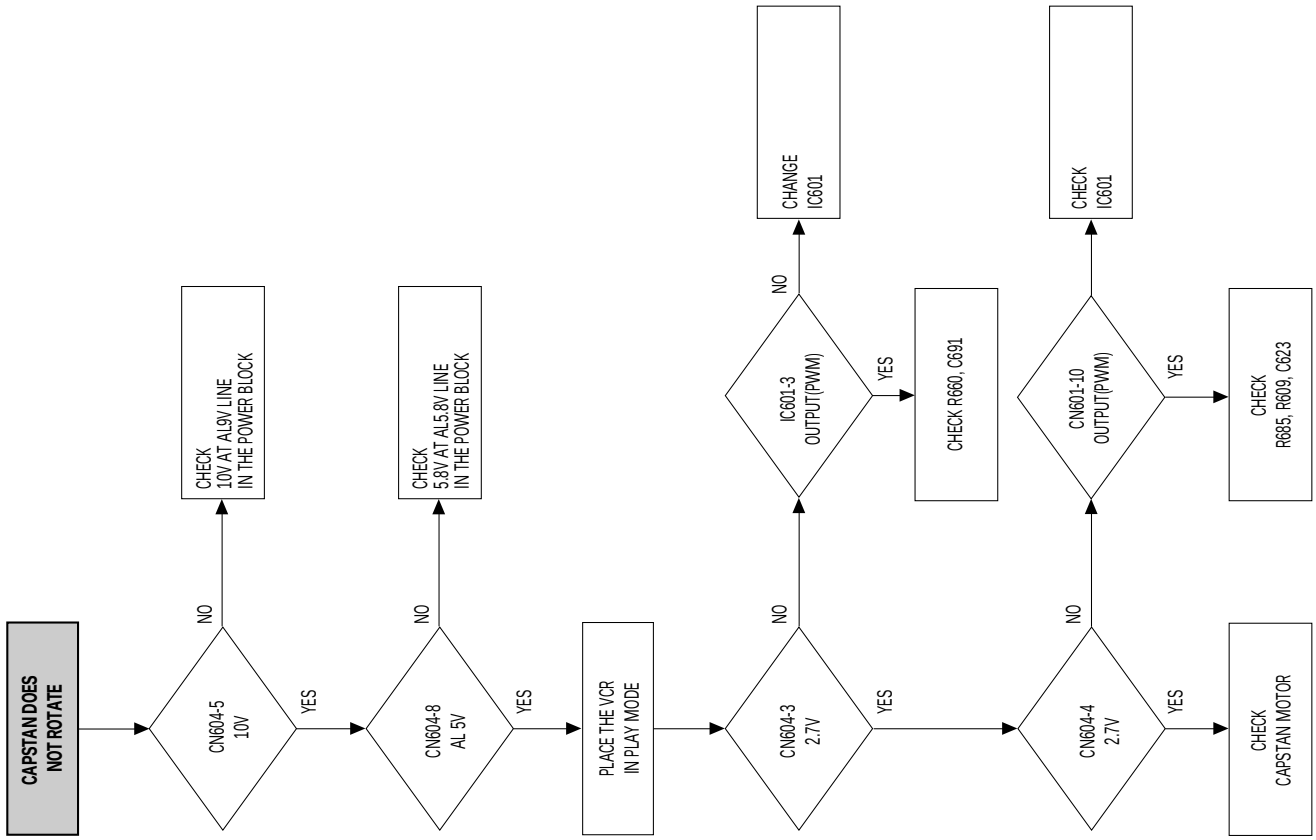

C
YES
ICD1-43
INPUT SIGNAL
NO
CHECK
RD24, CD4
YES
ICD1-32
24, 6MHz
NO
CHECK
XD1, ICD1, CD12-CD14
YES
ICD3-16
27MHz
NO
CHECK ICD3
APPLICATION CIRCUIT
YES
ICD2-4
27MHz
NO
CHECK ICD3, RD9
YES
ICD2-30
OUTPUT SIGNAL
NO
CHECK ICD2
APPLICATION CIRCUIT
YES
ICD8-2
"H"
NO
CHECK
ICD3-22
YES
CHECK
ICD8, LD2, CD64, RD1

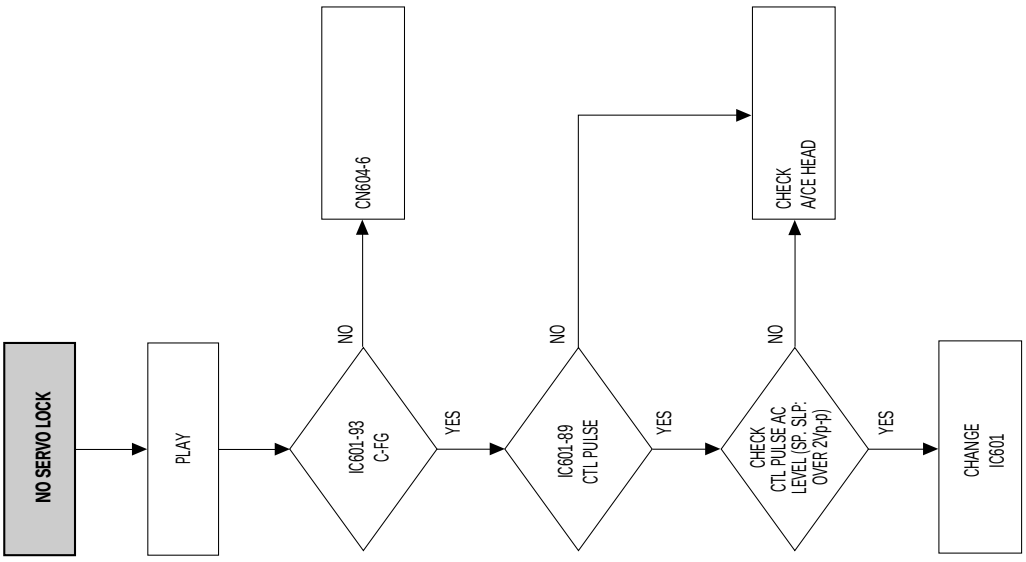

DIGITAL BLOCK NOT OPERATE
THROUGH MODE
OPERATE
YES
C
ICD8-1
INPUT SIGNAL
NO
CHECK I/O BLOCK
YES
ICD8-2 "L"
NO
CHECK D3-22
NO
ICD8-7
OUTPUT SIGNAL
YES
CHECK ICD8
APPLICATION CIRCUIT
NO
ICD5-3, 4
OUTPUT SIGNAL
YES
CHECK ICD5
APPLICATION CIRCUIT
NO
CHECK
CD60, CD61, CND2
I/O BLOCK
YES

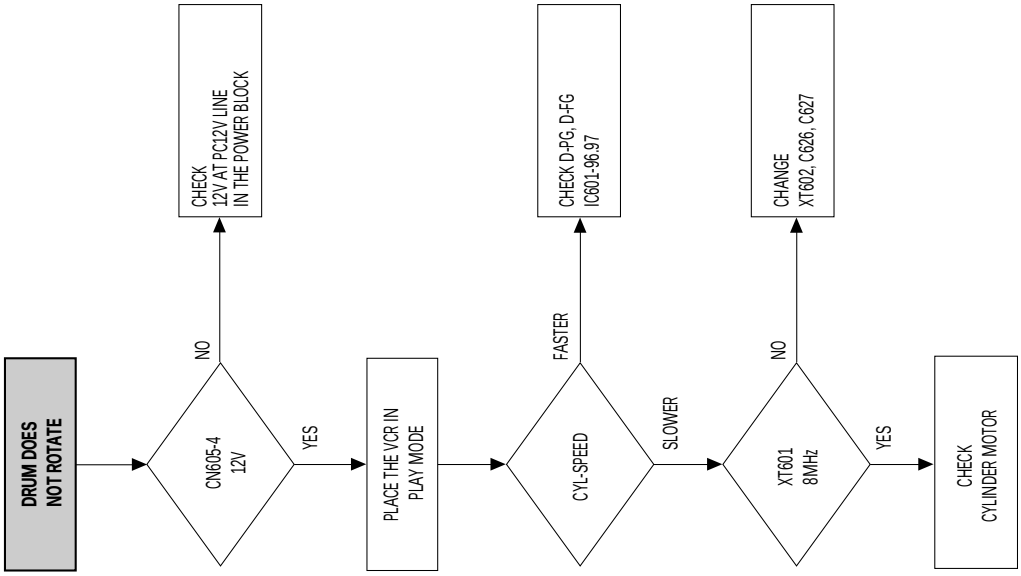

AUDIO MISSING IN REC MODE
CHECK AUDIO MISSING IN EE MODE
MISSING AUDIO
MONO
MONO
HIFI
IC501-16.37 AUDIO SIGNAL
NO
CHECK C519, C505
IC501-11.40 AUDIO SIGNAL
YES
CHECK IC501-15.38 C508, C517 AND CHAINGE IC501
YES
IC501-27 AUDIO FM
NO
CHECK R504 AND CHAINGE IC501
YES
IC501-26 AUDIO FM
NO
CHECK PC 5V LINE
IC501-22.25.5V
NO
YES
CHECK IC501
YES
CHECK CYLINDER


AUDIO MISSING IN EE MODE
PLACE VCR IN STOP MODE
INPUT SELECT MODE
AV
TUNER
L1
L2
IC501-52,61 AUDIO SIGNAL INPUT
NO
YES
CHECK R517, R518 R509, R510
IC501-2, 48 AUDIO SIGNAL INPUT
NO
YES
CHECK R521, R540 R522, R533
IC501-49, 63 AUDIO SIGNAL INPUT
NO
YES
CHECK R507, R508 R519, R520
IC501-6, 44 AUDIO SIGNAL INPUT
NO
YES
CHECK R501, R502, R505, R506, MTS BLOCK
IC501-5.45:1.9V
NO
YES
CHECK 5V, 9V LINE
IC501-8 A. MUTE
H
L
CHECK IC601
LINE OUT
IC301-56.58 AUDIO SIGNAL
NO
YES
CHECK C524, C525 R514, R516
IC501-57 AUDIO SIGNAL
NO
YES
CHANGE IC501
TM401-2 AUDIO SIGNAL
NO
YES
CHECK C529 R406, R407
CHECK TM401


AUDIO MISSING IN PB MODE
CHECK "AUDIO MISSING IN EE MODE"
PLACE THE VCR IN PB MODE
AUDIO SELECT
HIFI
MONO
IC501-18 AUDIO FM(MIXED)
NO
YES
CHECK IC501-35(A.H.D SW) C514, C513, R503 AND CHANGE CYLINDER OR IC501
CHANGE IC501
IC304-1 AUDIO SIGNAL
NO
YES
CHECK R3A10, C3A04 AND IC301-100 AUDIO SIGNAL
IC301-3 DC:2.3V
NO
YES
CHECK C3A17 AND CHANGE IC301
CHECK ACE HEAD C3A15, C3A16, R3A06, R3A07, R3A08 AND CHANGE IC301
MONO
CHECK MISSING IN PB MODE
NO
CHECK PB MODE
YES
IC301-76 AUDIO SIGNAL
NO
IC501-53 AUDIO SIGNAL
NO
CHANGE IC501
YES
CHECK R3A32, R3A28 C3A24
YES
IC301-96 AUDIO SIGNAL
NO
CHECK IC301-77, C338, R326 AND CHANGE IC301
YES
IC301-98 AUDIO SIGNAL
NO
CHECK R3A37, R3A22, C3A02 R3A21, C3A07
YES
IC301-7 AUDIO SIGNAL
NO
CHECK IC301
YES
IC301-6 MIX SIGNAL (AUDIO+70KHz)
NO
CHECK R3A04
YES
CHECK Q3A06-BASE REC "H"
FL3A01-6 OSCILLATION
NO
CHECK OSC BLOCK
YES
CHECK A/CE HEAD


CAPSTAN DOES NOT ROTATE
CN604-5 10V
NO
CHECK 10V AT AL9V LINE IN THE POWER BLOCK
YES
CN604-8 AL 5V
NO
CHECK 5.8V AT AL5.8V LINE IN THE POWER BLOCK
YES
PLACE THE VCR IN PLAY MODE
CN604-3 2.7V
NO
CHANGE IC601
YES
IC601-3 OUTPUT(PWM)
NO
CHECK R660, C691
YES
CN604-4 2.7V
NO
CHECK IC601
YES
CN601-10 OUTPUT(PWM)
NO
CHECK R685, R609, C623
YES
CHECK CAPSTAN MOTOR


NO SERVO LOCK
PLAY
IC601-93 C-FG
NO
CN604-6
YES
IC601-89 CTL PULSE
NO
YES
CHECK CTL PULSE AC LEVEL (SP: SLP: OVER 2Vp-p)
NO
CHECK A/CE HEAD
YES
CHANGE IC601

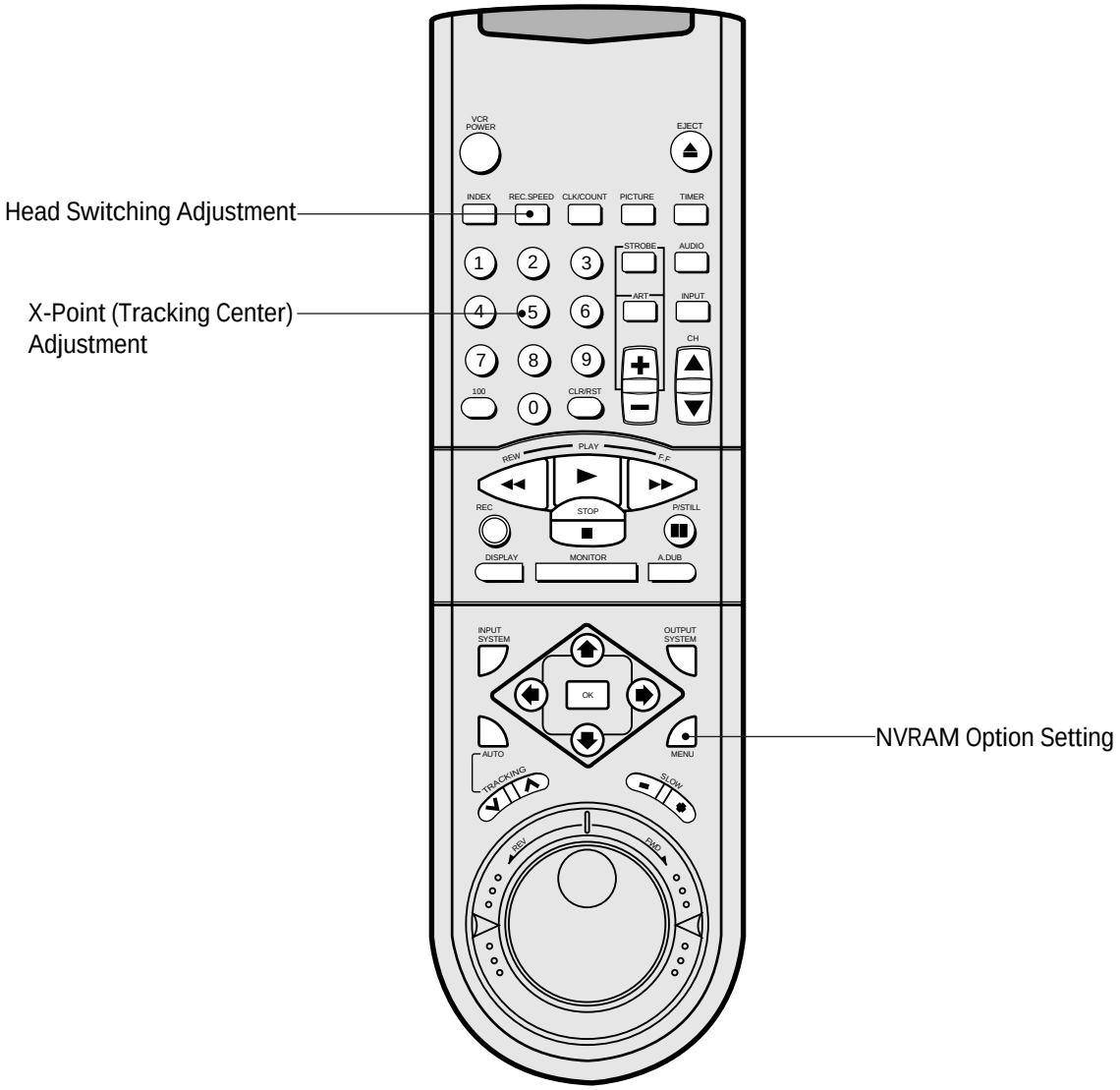

DRUM DOES NOT ROTATE
CN605-4 12V
NO
CHECK 12V AT PC12V LINE IN THE POWER BLOCK
YES
PLACE THE VCR IN PLAY MODE
CYL-SPEED
FASTER
CHECK D-PG, D-FG IC601-96.97
SLOWER
XT601 8MHz
NO
CHANGE XT602, C626, C627
YES
CHECK CYLINDER MOTOR

6. Alignment and Adjustment

6-1 Reference

1) X-Point (Tracking center) adjustment, “Head switching adjustment” and “NVRAM option setting” can be adjusted with remote control.
2) When replacing the Micom (IC601) and NVRAM (IC605 ; EEPROM) be sure to adjust the “Head switching adjustment” and “NVRAM option setting”.
3) When replacing the cylinder ass’y, be sure to adjust the “X-Point” and “Head switching adjustment”.
4) Among Samsung VCR remote control used for adjustment as a accessory, only the remote control that has figures buttons (0 ~ 9) is available for all adjustment regardless of chassis.
5) How to adjustment.
   - Press the “TEST” (SV-7000W ; SW711, SV-5000W ; SW718) button on Timer PCB to set the adjustment mode.
   - If the corresponding adjustment button is pressed, the adjustment is performed automatically.
   - If the adjustment is completed, be sure to turn the power off.

6-1-1 Location of adjustment button of remote control

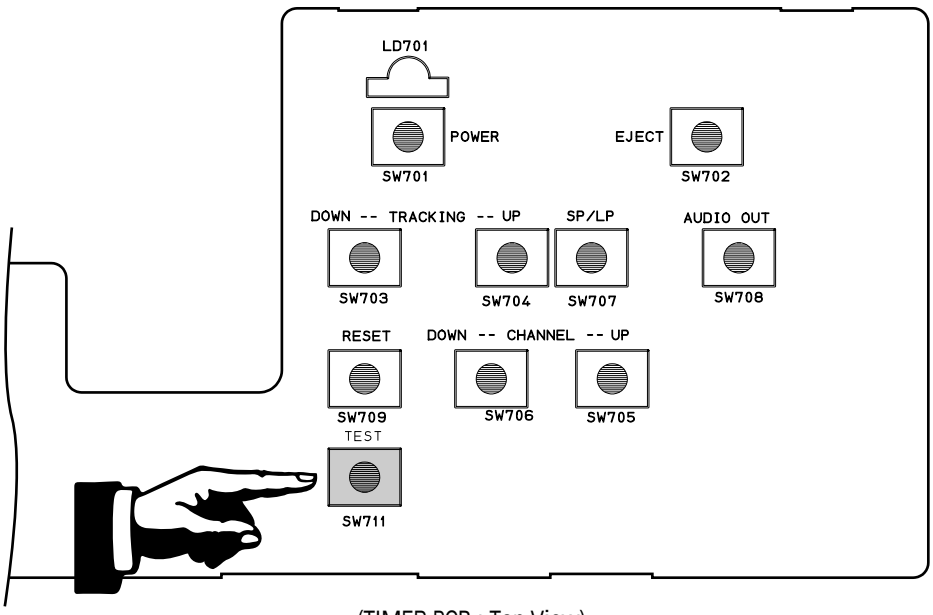


Remote Control for adjustment is not supplied as a Service Jig.

Fig. 6-1

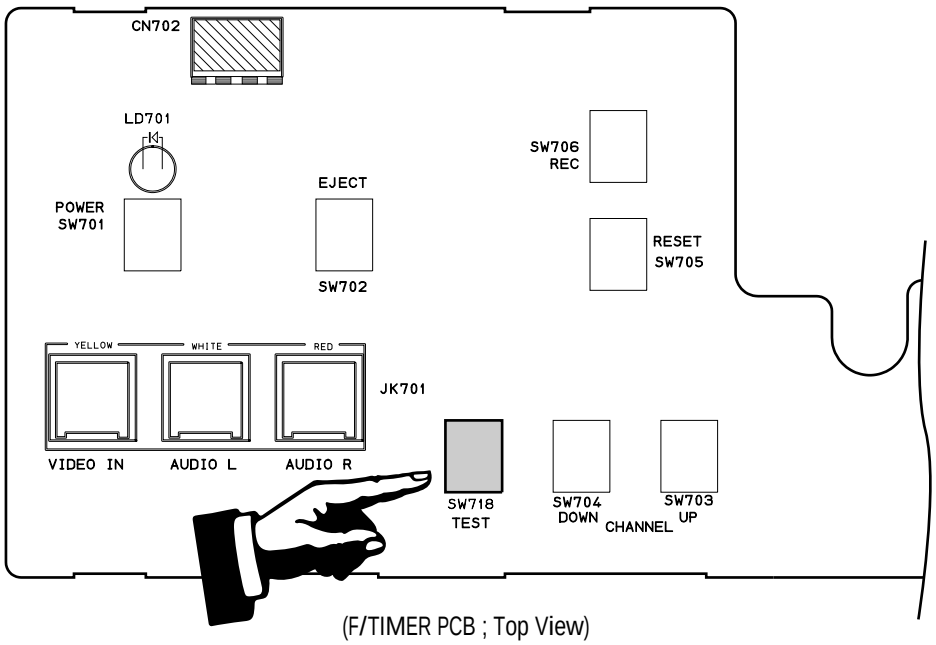
6-1-2 Test point location for adjustment mode setting

SV-7000W



(TIMER PCB ; Top View)

SV-5000W



(F/TIMER PCB ; Top View)

Fig. 6-2

6-2 Mechanical Adjustment

Note : Refer to the Mechanical Manual "DX-9R (AC68-00001A)" for the adjustment and confirmation of ass'y full deck.

6-2-1 The number and position of test point

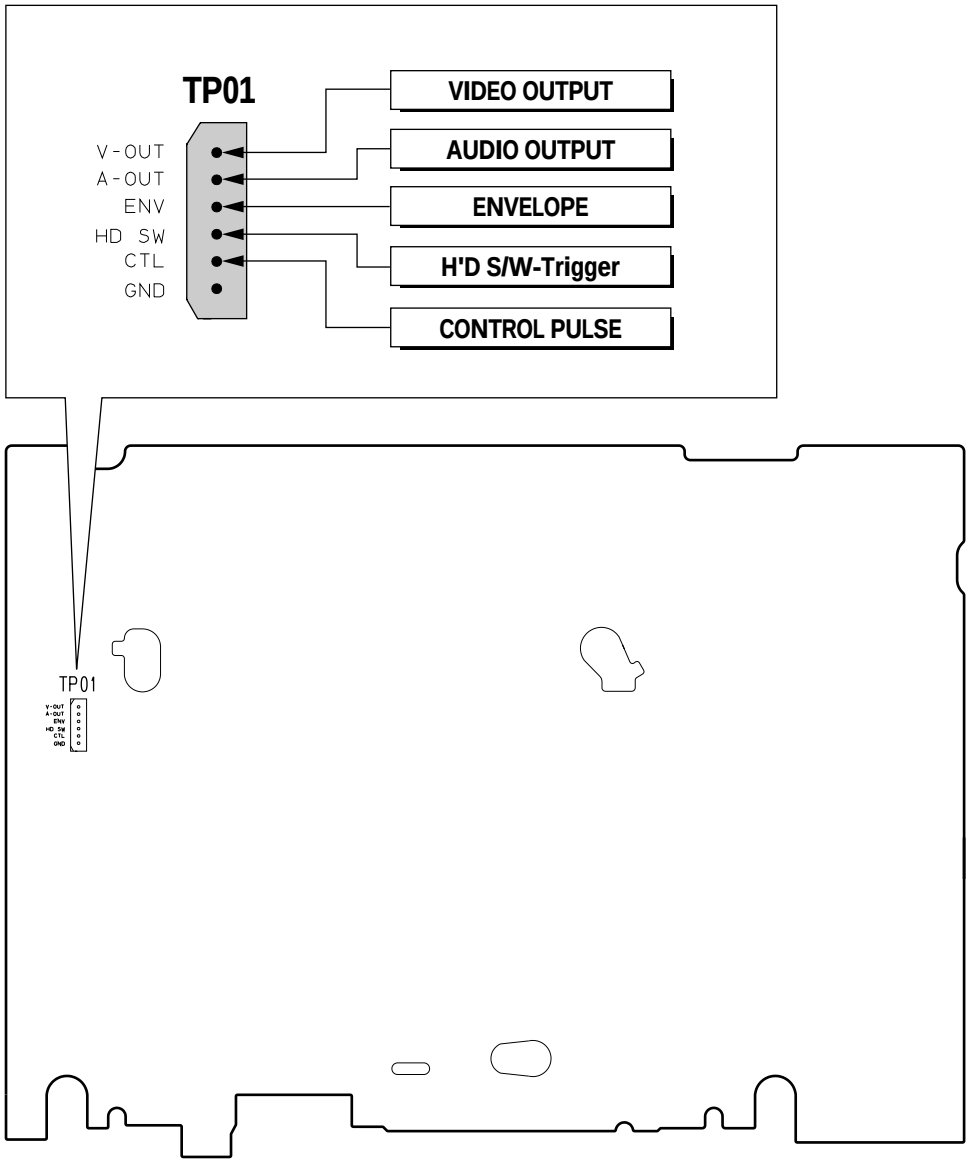


Fig. 6-3 Location of Test point (Main PCB-Top View)

6-2-2 ACE Head Position (X-Point) Adjustment

(See the 2-2-1(d) ACE Head Position (X-Point) Adjustment on page 2-2 of the Mechanical Manual)

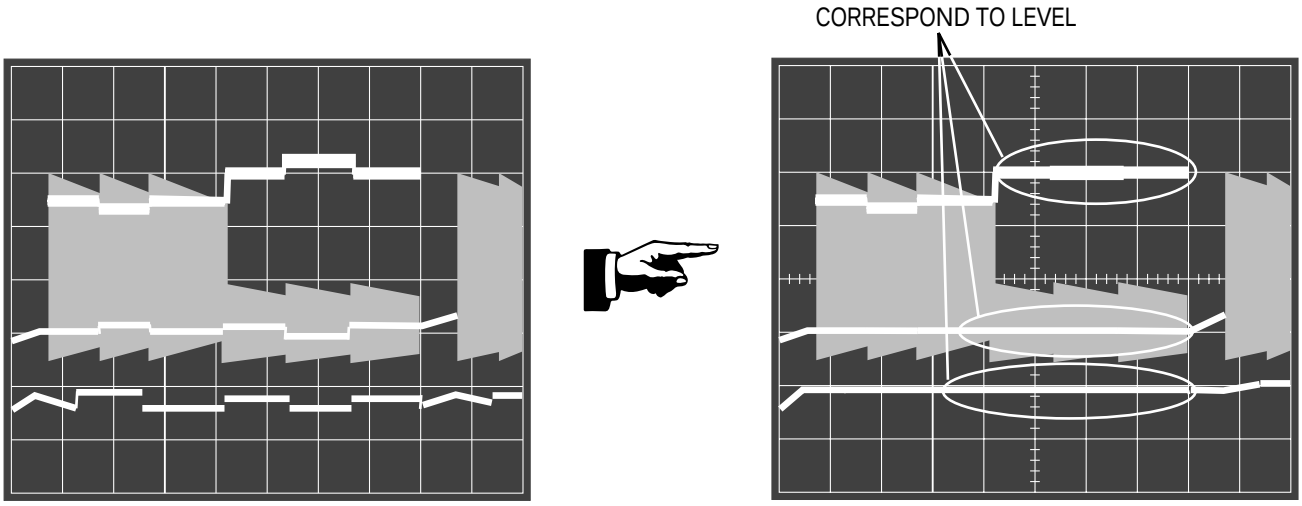
1) Playback the alignment tape (Color bar).
2) Press the "TEST" (SV-7000W ; SW711, SV-5000W ; SW718) button on Timer PCB to set the adjustment mode. (See Fig. 6-2)
3) Press the "5" button of remote control then adjustment is operated automatically. (See Fig. 6-1)
4) Connect the CH-1 probe to TP01 (Envelope) the CH-2 probe to TP01 (H'D switching pulse) and then trigger to CH-1.
5) Insert the (-) driver into the X-Point adjustment hole and adjust it so that envelope waveform is maximum.
6) Turn the Power off.

6-3 Head Switching Point Adjustment

1) Playback the alignment tape.
2) Press the "TEST" (SV-7000W ; SW711, SV-5000W ; SW718) button on Timer PCB to set the adjustment mode. (See Fig. 6-2)
3) Press the "REC.SPEED" button of remote control then adjustment is operated automatically. (See Fig. 6-1)
4) Turn the Power off.

6-4 NTSC Skew Adjustment

1) Load the instrument with an alignment tape and playback the color bar signal (NTSC SP color bar tape).
2) Connect CH-1 scope probe (1V/div, 50μs/div.).
3) Connect CH-2 scope probe to video terminal of J4303 (I/O PCB).
4) Set the VCR to RPS (Reverse picture search) or FPS (Forward picture search) mode.
5) Adjust VR4301 (I/O PCB) so that the 100% white and pedestal is as flat as possible.



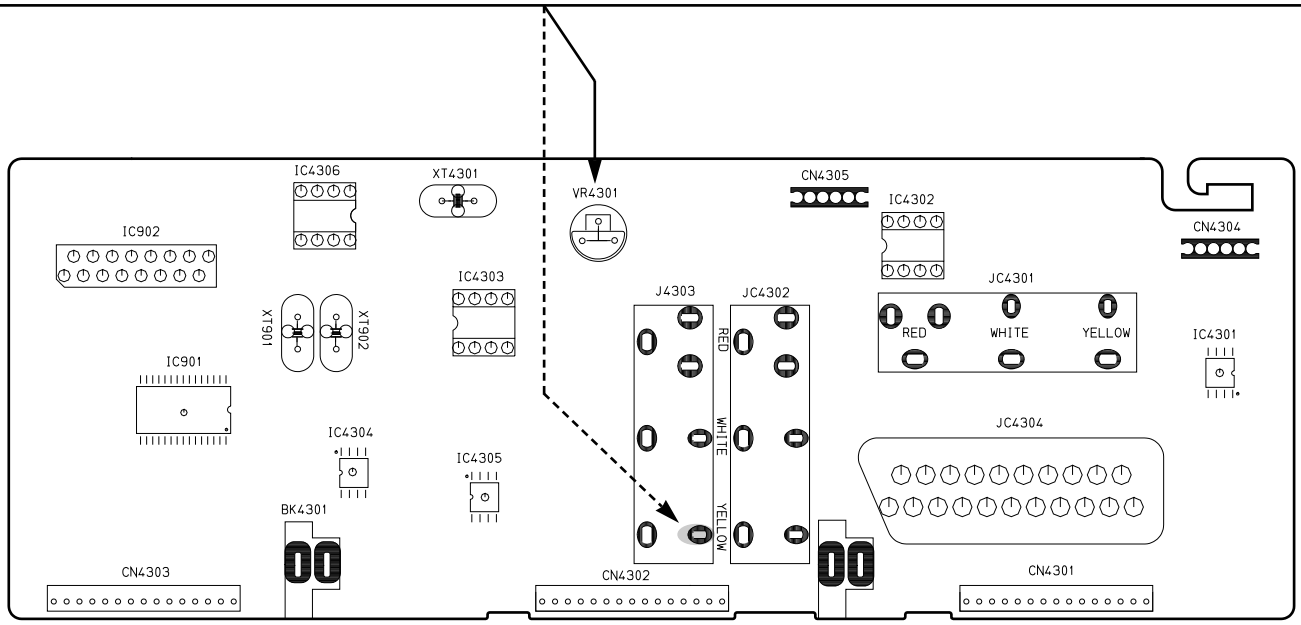


Fig. 6-4 I/O PCB (Top View)

6-5 NVRAM Option Setting

1) NVRAM Option is adjusted at production line basically.
2) In case Micom (IC601) and NVRAM (IC605 ; EEPROM) is replaced, be sure to set the corresponding option number of the repaired model. (If the option is not set, the unit is not operated.)

1) Press the "TEST" (SV-7000W ; SW711, SV-5000W ; SW718) button on Timer PCB to set the adjustment mode. (See Fig. 6-2)
2) Press the "MENU" button on the remote control about 5 seconds then option setting display is appeared. (See Fig. 6-5)
3) Select the option number (See Table 6-1) of corresponding model with " ➡ " and " ⬅ " button on the remote control.
4) If selecting the option number is completed, press the " ⬆ " button of remote control. (If "STOP" button is pressed, the selected number is changes reversed color. ; See Fig. 6-5)
5) Press the "OK" button of remote control again to store the option number. ("PLEASE WAIT" is displayed for a second as shown Fig. 6-6 and this setting is completed.)
6) Turn the Power off.

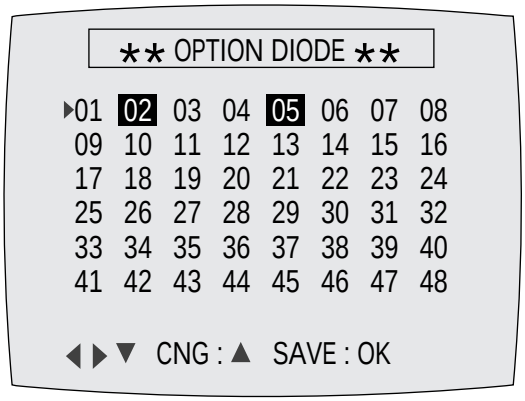


Fig. 6-5

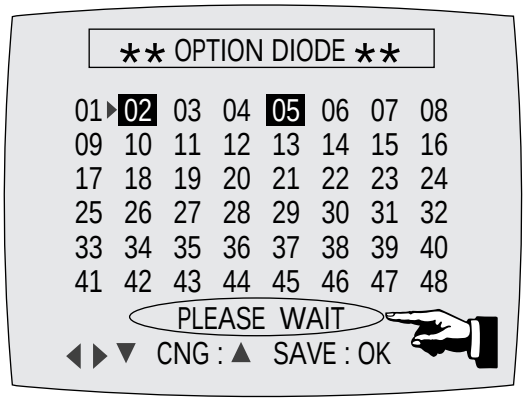


Fig. 6-6

<Table 6-1>

MODELS	TV SYSTEM	OPTION NUMBER
SV-7000W	NTSC/PAL	1, 2, 3, 4, 5, 6, 9, 10, 11, 13, 14, 15, 16
SV-5000W	NTSC	1, 2, 3, 4, 6, 8, 13, 14, 15
	PAL	1, 2, 3, 4, 5, 9, 10, 11, 13, 14, 15

MEMO

7. Exploded View and Parts List

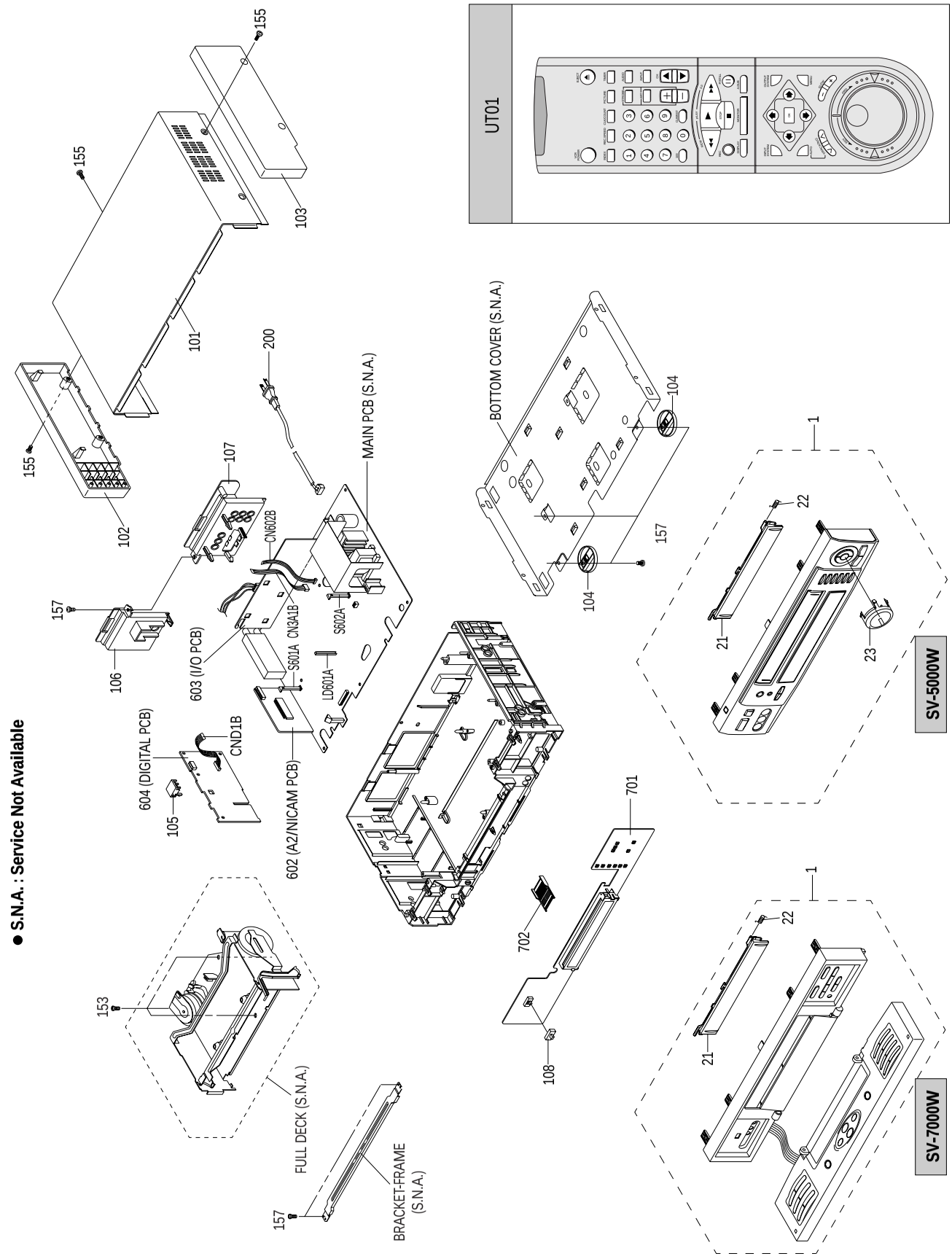
Page

7-1 Cabinet Assembly -- 7-2

7-2 Mechanical Parts (Top Side) --------------------------------- 7-4

7-3 Mechanical Parts (Bottom Side) ------------------------------ 7-6

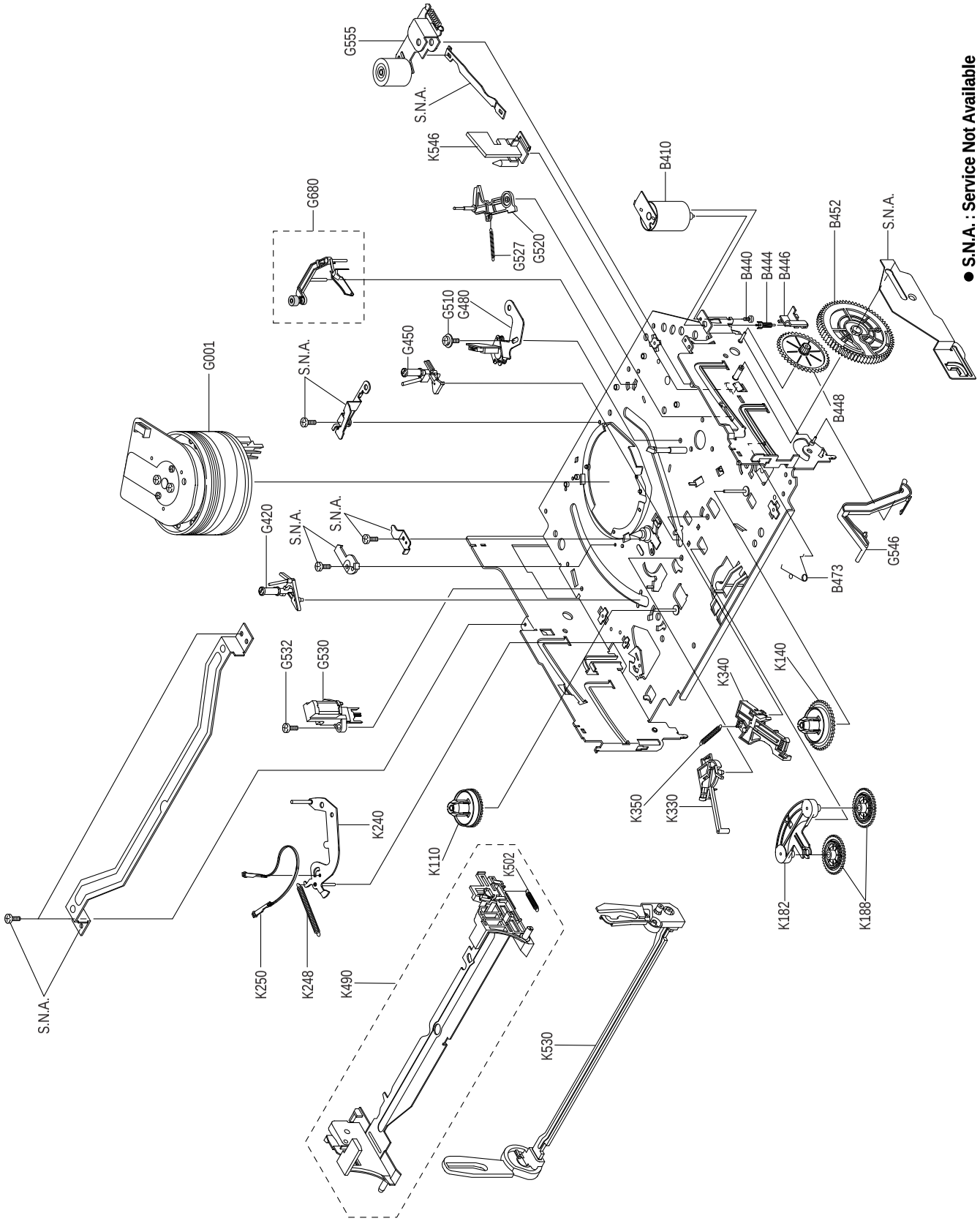
7-1 Cabinet Assembly



Loc. No	Parts No.	Description ; Specification	Remark
1	**Refer to table below**	ASSY-PANEL FRONT	
21	**Refer to table below**	DOOR-CASSETTE	
22	AC61-62003A	SPRING;-,SUS304,(GE/RCA),-,-,-,-	
23	AC64-00094A	DECORATION-RING;-,ABS94HB,-,-,BLK,-,SV-3	
101	**Refer to table below**	CABINET-TOP-ASSY	
102	AC97-00484A	ASSY-PANEL SIDE L	SV-7000W ONLY
103	AC97-00485A	ASSY-PANEL SIDE R	SV-7000W ONLY
104	**Refer to table below**	LEG-DECORATION	
105	AC61-20237A	HOLDER;ABS94HB,T2,BLK,23.1*18.5,-,-	
106	AC61-00029A	CONNECTOR-BOARD;-,HIPS94HB,-,T2,59,-,BLK	
107	AC61-00028A	CONNECTOR-BOARD;-,HIPS94HB,-,T2,128.5,-,	
108	AC64-11009A	KNOB-SLIDE;-,ABS,HB,BLK,-,SV-300W	SV-7000W ONLY
153	AC60-12126A	SCREW-BH;-,BH,-,4*12,FE,FZY,-,-,-	
155	AC60-12134A	SCREW-TAP BH;-,BH,-,2-4X16,-,FE	
157	AC60-10063A	SCREW-TAPTITE;BH,+,-,M3,L12,ZPC3,SWRCH18	
200	AC39-10200N	POWER-CORD;EP2	U.S.A./CANADA ONLY
	AC39-10014A	POWER-CORD;EP2	JAPAN ONLY
	AC39-12022K	POWER-CORD;FITTED	U.K./HONGHONG ONLY
	AC39-10015A	POWER-CORD;AP2	AUSTRALIA ONLY
	AC39-10019A	POWER-CORD;CP2	COMMOM
602	**Refer to table below**	ASSY-PCB-NICAM;SV-5000W	
603	AC92-00172A	ASSY-PCB-IO;SV-7000W/5000W	
604	AC92-00225A	ASSY-PCB-DIGITAL;SV-7000W/5000W	
701	**Refer to table below**	ASSY-PCB-TIMER;SV-7000W	
702	3711-003460	CONNECTOR-HEADER;NOWALL,20P,1R,1.5MM,STR	
CN3A1B	3809-001111	CABLE-FLAT;30V,80C,130mm,7P,1.25mm,UL289	
CN602B	3809-001149	CABLE-FLAT;30V,80C,120MM,5P,1.25MM,UL289	
CND1B	3809-001150	CABLE-FLAT;30V,80C,120MM,14P,1.25MM,UL28	
LD601A	AC61-21009A	HOLDER-LED;-,POM(M90-44),-,BLK,-,X-9	
S601A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9	
S602A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9	
UT01	**Refer to table below**	REMOCON-ASSY;-,NR4250,-,50KEY	

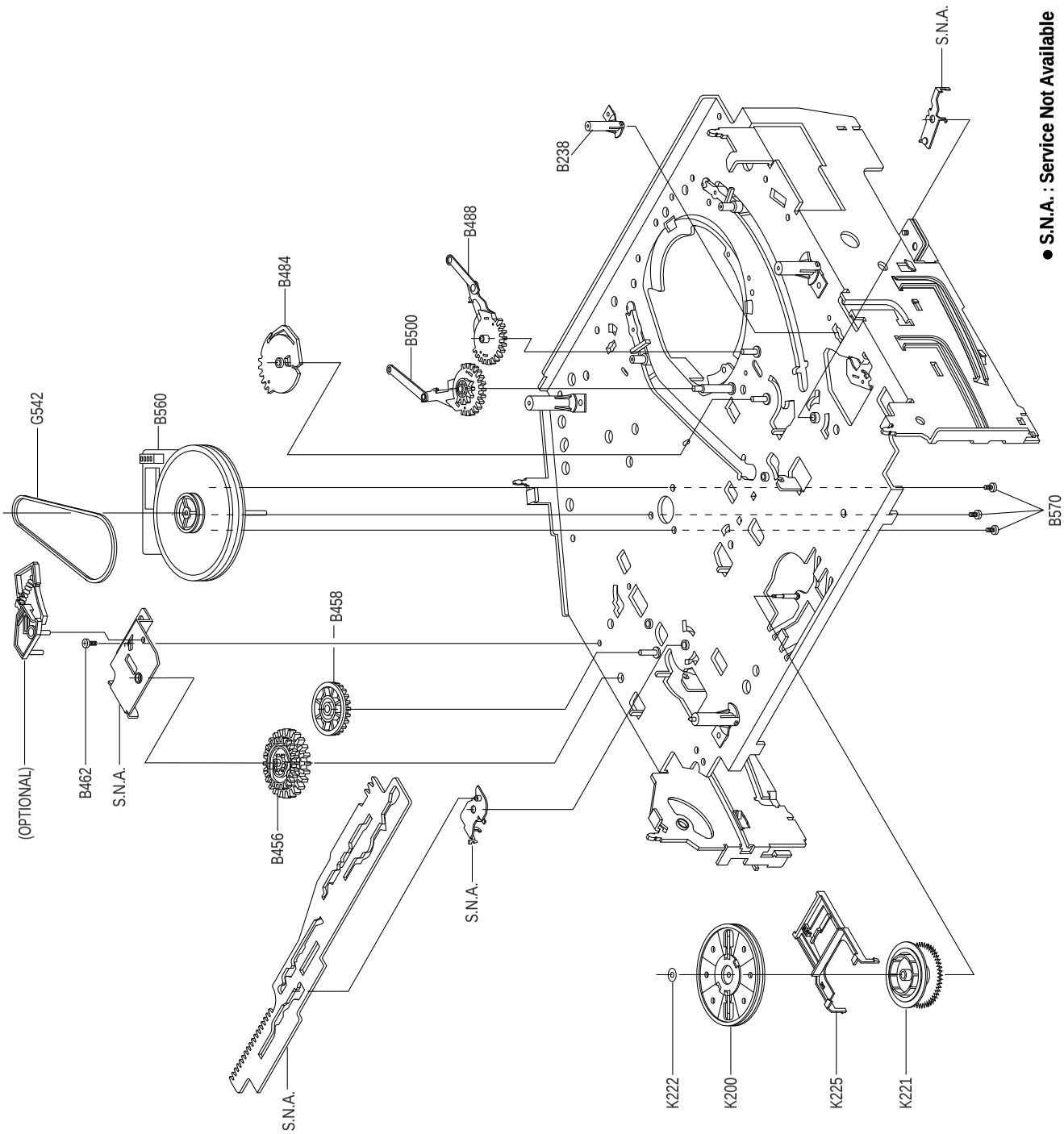
TV SYSTEM	LOCA-NO / MODELS	1	21	101	104	602	701	UT01
NTSC AREA	SV-7000W	AC97-00470E	AC64-00118A	AC64-30902E	AC64-80136A	AC92-00387A	AC92-00214A	AC59-00010D
	SV-5000W	AC97-00470C	AC64-00083B	AC64-30902D	AC6442114A	AC92-00226A	AC92-00239A	AC59-00010D
PAL/SECAM AREA	SV-7000W	AC97-00470D	AC64-00118A	AC64-30902F	AC64-80136A	AC92-00387A	AC92-00214A	AC59-00010D
	SV-5000W	AC97-00470B	AC64-00083C	AC64-30902G	AC64-80136A	AC92-00386A	AC92-00239A	AC59-00010F

7-2 Mechanical Parts (Top Side)



Loc. No	Parts No.	Description ; Specification	Remark
B410	AC31-12016A	MOTOR-LOADING ASSY;-,-,X-9	
B440	AC60-10515A	SCREW-MACHINE;-,PH,+,-,M3,L3,ZPC,-,YEL	
B444	AC66-20571A	GEAR-WORM;-,POM SW-01,0.5,2,-,4.5,X-9	
B446	AC61-21005A	HOLDER-WORM;-,POM M90-44,-,-,-,X-9	
B448	AC66-20573A	GEAR-WORM WHEEL;-,POM SW-01,0.6,11,-,6.6	
B452	AC66-20575A	GEAR-FL CAM;-,POM SW-01,M0.6,Z88,-,PCD58	
B473	AC61-60559A	SPRING-PINCH DRIVE;-,TS,SUS304,PI0.5,OD4	
G001	AC97-00476A	ASSY-DRUM;CX-9,-,PAL 6HD/DLC,W/W	
G420	AC66-80142A	SLIDER-SUPPLY ASSY;-,X-9(TS),-,-,-,X-9	
G450	AC66-80141A	SLIDER-TAKE UP ASSY;-,X-9(TS),-,-,-,X-9	
G480	AC33-00003A	HEAD-ACE ASSY;SHINHEUNG,-,-,-,-,X-9	
G510	AC60-10518A	SCREW-TAP TITE;-,PH,+,SW+ZW,M2.6,L5.6,ZP	
G520	AC66-30539A	LEVER-#9 GUIDE ASSY;-,X-9(TS),-,-,-,X-9	
G527	AC61-60553A	SPRING-#9 GUIDE;-,ES,SUS304-WPB,OD3.1,0.	
G530	AC33-00002A	HEAD-FE;-,HVFHP0038A,-,-,-,X-9	
G532	AC60-10519A	SCREW-TAP TITE;-,PH,+,-,M2.6,L8,ZPC	
G546	AC66-30535A	LEVER-FL DOOR;-,POM M90-44,-,-,BLK,X-9	
G555	AC59-90403A	UNIT-PINCH ASSY;X-9,-	
G680	AC66-30557A	LEVER-H/CLEANER ASSY;-,POM+URETHANE,-,-	(OPTIONAL)
K110	AC66-10267A	REEL-DISK S;-,POM M90-44,-,-,X-9	
K140	AC66-10268A	REEL-DISK T;-,POM M90-44,-,-,X-9	
K182	AC66-30524A	LEVER-IDLER;-,POM9044,-,-,-,-	
K188	AC66-20577A	GEAR-IDLER;-,PEBAX 7033,-,-,-,-,X-9	
K240	AC66-30538A	LEVER-TENSION ASSY;-,X-9(TS),-,-,-,X-9	
K248	AC61-60554A	SPRING-TENSION LEVER;-,ES,SUS304-WPB,OD3	
K250	AC63-12029A	BAND-BRAKE ASSY;-,X-9(TS),-,-,-,X-9	
K330	AC66-30550A	LEVER-S.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K340	AC66-30549A	LEVER-T.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K350	AC61-60564A	SPRING-BRAKE;-,TENSION,SWP-A,0.25,3,-,X-	
K490	AC61-21010B	HOLDER-CASS ASSY;-,SECC+POM+SUS,-,-,SEIN	
K502	AC61-60561A	SPRING-FL.LEVER-LR;-,ES,SUS304 WPB,PI2.7	
K530	AC66-30546A	LEVER-FL.ARM ASS'Y;-,SECC+POM+SUS,-,-,-	
K546	AC61-50658A	GUIDE-CASS. DOOR;-,POM M90-44,-,-,NTR,-	

7-3 Mechanical Parts (Bottom Side)



Loc. No	Parts No.	Description ; Specification	Remark
B238	AC61-50660A	SLEEVE-TENSION;-,POM M90-44,-,-,ID3,-,-	
B456	AC66-20576A	GEAR-JOINT 1;-,POM SW-01,M1.0,Z22,-,PCD2	
B458	AC66-20574A	GEAR-JOINT 2;-,POM SW-01,M1.0,Z14,-,PCD1	
B462	AC60-10517A	SCREW-TAP TITE;-,PH,+,-,M2.6,L5,ZPC,-,YE	
B484	AC66-20580A	GEAR-LOADING DRIVE;-,POM SW-01,M1.0,Z32,	
B488	AC66-30543A	LEVER-S LOAD ASSY;-,-,-,-,-,X-9	
B500	AC66-30542A	LEVER-T LOAD ASSY;-,-,-,-,-,X-9	
B560	AC31-12017A	MOTOR-CAPSTAN;DMVCMC07C,-,X-9	
B570	AC60-10514A	SCREW-CAPSTAN;-,PH,+,M2.6,L6,-	
G542	AC66-60051A	BELT-PULLEY;-,5CM-70,2 * 2,-,71.3,-,X-9	
K200	AC61-21012A	HOLDER-CLUTCH ASSY;-,-,-,-,-,X-9	
K221	AC66-20581A	GEAR-CENTER ASSY;-,POM,M=O.5,-,HIGHT T.,	
K222	AC60-30306A	WASHER-SLIT;-,-,ID2.1,OD5.0,T0.5,-,POLYS	
K225	AC66-30547A	LEVER-UP DOWN ASSY;-,POM+SUS,-,-,-,X-9	

MEMO

8. Electrical Parts List

Loc.No	Part No	Description ; Specification	Remark
-	-	**ASSY-PCB-MAIN**	**S.N.A.**
S.M.P.S. PARTS			
C01	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13.	⚠
C02	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13.	⚠
C03	2201-000934	C-CERAMIC,DISC;3.3nF,20%,400V,Y5U,TP,18x	
C04	2201-000934	C-CERAMIC,DISC;3.3nF,20%,400V,Y5U,TP,18x	
C05	2201-002044	C-CERAMIC,DISC;100pF,10%,400V,Y5P,TP,11x	
C07	2201-002044	C-CERAMIC,DISC;100pF,10%,400V,Y5P,TP,11x	
C10	2401-000342	C-AL;100uF,20%,400V,WT,-,33x30,10mm	
C11	2305-001029	C-FILM,MPEF;10nF,10%,630V,TP,12x9x12.5,5	
C12	2401-001200	C-AL;33uF,20%,50V,WT,TP,6.3x11,5	
C13	2201-000376	C-CERAMIC,DISC;220pF,5%,50V,SL,TP,4x4,5	
C14	2201-000012	C-CERAMIC,DISC;220pF,10%,1KV,Y5P,TP,6x5,	
C30	2401-000392	C-AL;10uF,20%,100V,WT,TP,6.3x11,2.5	
C31	2401-003478	C-AL;100UF,20%,25V,LZ,TP,8X11.5MM,5	
C32	2401-003477	C-AL;330UF,20%,25V,LZ,TP,10X12.5MM,	
C33	2401-003477	C-AL;330UF,20%,25V,LZ,TP,10X12.5MM,	
C34	2401-003480	C-AL;1000UF,20%,10V,LZ,TP,10X16MM,5	
C35	2401-001479	C-AL;470uF,20%,10V,GP,-,-,TP	
C36	2401-001573	C-AL;47uF,20%,50V,GP,TP,6.3x11,2.5	
C37	2401-001479	C-AL;470uF,20%,10V,GP,-,-,TP	
C38	2301-000381	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C39	2301-000129	C-FILM,PEF;100nF,5%,50V,TP,10X9X4.3X5,5m	
CN01	3711-000178	CONNECTOR-HEADER;1WALL,2P,1R,3.96mm,STRA	
D01	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D02	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D03	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D04	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D05	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D10	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D11	0402-000276	DIODE-RECTIFIER;UF4007,1KV,1A,DO-41,TP	
D12	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D30	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D31	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D32	0402-001194	DIODE-RECTIFIER;UG2D,200V,2A,DO-204AC,TP	
D33	0404-000128	DIODE-SCHOTTKY;FMB-G14L,45V,5A,TO-220F,T	
D34	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D35	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
F01 ⚠	3601-001122	FUSE-FERRULE;250V,1.6A,FA,GLASS U.S.A./CANADA/JAPAN ONLY	
⚠	3601-001123	FUSE-FERRULE;250V,1.6A,5.2x20mm COMMOM	
IC01	1203-001803	IC-PWM CONTROLLER;STR-F6552,TO-220,5P,-,	
IC02	0604-001028	PHOTO-COUPLER;TR,50-600%,250mW,DIP-4,ST	⚠
IC03	AC14-12006D	IC;KA431Z,TO-92,TAPING	
L01	AC29-30050B	FILTER-LINE NOISE;-,400uH,-,AC250V,TR12.	⚠
L02	AC27-32001E	COIL-LINE FILTER;SHL030,25MH,1.5,STICK,-	⚠
L11	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
L30	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
L31	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
L32	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
L33	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
PT01	AC26-00001H	TRANS-SWITCHING;-,100V-240V,DEMKO,UL,EER	⚠
R01	2002-000322	R-COMPOSITION;2.7Mohm,10%,1/2W U.S.A./CANADA ONLY	
R10	2006-000262	R-CEMENT;2.7ohm,10%,2W,CB,TP,7.5x11x20.	
R11	2001-001086	R-CARBON(S);18KOHM,5%,1/2W,AA,TP,2.4X6.4	
R12	2001-001086	R-CARBON(S);18KOHM,5%,1/2W,AA,TP,2.4X6.4	
R13	2001-001086	R-CARBON(S);18KOHM,5%,1/2W,AA,TP,2.4X6.4	
R14	2001-000073	R-CARBON;33KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R15	2001-000096	R-CARBON(S);1MOHM,5%,1/2W,AA,TP,2.4X6.4M	
R16	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R17	2001-000527	R-CARBON;22OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R18	2003-002092	R-METAL OXIDE;33Kohm,5%,3W,AE,BK,25x8mm	
R19	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R20	2003-000105	R-METAL OXIDE;0.33ohm,5%,2W,AD,TP,6x16mm	
R21	2003-002092	R-METAL OXIDE;33Kohm,5%,3W,AE,BK,25x8mm	
R30	2001-000440	R-CARBON;1OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R31	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R32	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R33	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R34	2004-000869	R-METAL;3Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R35	2004-000459	R-METAL;2.2Kohm,1%,1/8W,AA,TP,1.8x3.2m	
VA01	1405-001026	VARISTOR;470V,600A,9x7mm,TP	⚠
POWER PARTS			
C1P102	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P103	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C1P104	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
C1P105	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P106	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P108	2401-001507	C-AL;47uF,20%,16V,GP,TP,6.3x5,5	
C1P110	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C1P115	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P116	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C1P117	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
D1P101	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P103	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P104	0402-000165	DIODE-RECTIFIER;1N5819,40V,1A,DO-41,TP	
D1P105	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P108	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P109	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P113	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P114	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P116	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P117	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P118	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P119	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P30	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P40	0402-000165	DIODE-RECTIFIER;1N5819,40V,1A,DO-41,TP	
Q1P101	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P102	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P103	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P104	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q1P105	0504-000116	TR-DIGITAL;KSR1001,NPN,300MW,4.7K/4.7K,T	
Q1P108	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P114	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P115	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	
Q1P116	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q1P117	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
R1P103	2001-000034	R-CARBON;220OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P105	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1P106	2001-000611	R-CARBON;3.9KOHM,5%,1/4W,AA,TP,2.4X6.4M	
R1P107	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1P108	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1P109	2001-000038	R-CARBON;390OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P112	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1P117	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1P127	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1P128	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1P129	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
ZD1P01	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD1P02	0403-000717	DIODE-ZENER;MTZJ5.1B,5.1V,4.94-5.2V,500m	
ZD1P03	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
ZD1P06	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	

Loc.No	Part No	Description ; Specification	Remark
ZD1P07	0403-000388	DIODE-ZENER;UZP27B,27V,25.5-30V,1W,DO-41	
SYSTEM CONTROL/SERVO PARTS			
C601	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C602	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C603	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C604	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C605	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C606	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C607	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C608	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	
C610	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C611	2203-000374	C-CERAMIC,CHIP;15nF,10%,50V,X7R,TP,2012,	
C618	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C619	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C620	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C621	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C622	2301-000471	C-FILM,PEF;68nF,5%,50V,TP,9x12x4.5mm,5mm	
C623	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
C624	2203-000634	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,-	
C625	2203-000634	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,-	
C626	2203-000634	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,-	
C627	2203-000634	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,-	
C633	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C634	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C635	2203-001702	C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012	
C636	2203-001702	C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012	
C637	2203-000938	C-CERAMIC,CHIP;0.47nF,5%,50V,NPO,TP,2012	
C638	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C639	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,NPO,TP,2012	
C640	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C641	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C642	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C643	2401-001507	C-AL;47uF,20%,16V,GP,TP,6.3x5,5	
C645	2401-001507	C-AL;47uF,20%,16V,GP,TP,6.3x5,5	
C646	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C688	2401-001507	C-AL;47uF,20%,16V,GP,TP,6.3x5,5	
C690	2301-000471	C-FILM,PEF;68nF,5%,50V,TP,9x12x4.5mm,5mm	
C691	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C692	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
CN601	AC39-20817S	LEAD CONNECTOR-ASSY;DP,SMH200-02,YBH200-	
CN602	3708-001163	CONNECTOR-FPC/FC/PIC;5P,1.25mm,STRAIGHT,	
CN603	3710-001146	CONNECTOR-SOCKET;20P,1R,1.5mm,ANGLE,SN	
CN604	3711-003749	CONNECTOR-HEADER;BOX,8P,2R,2mm,STRAIGHT,	
D603	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D604	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D613	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D620	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
IC601	AC09-00057A	IC MCU;784928GF-XXX-3BA,N120-XXX-3BA,	
IC602	1003-001162	IC-MOTOR DRIVER;KA3082,SIP,10PIN,25MIL,D	
IC604	AC14-12009W	IC-RESET;PST572K,TO-92,R59-1766 2.5V	
IC605	1103-001171	IC-EEPROM;24L161,16KBIT,DIP,8P,300MIL,10	
IC608	1203-000515	IC-VOL. DETECTOR;7042,TO-92,3P,177MIL,PL	
L601	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L603	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L604	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L605	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
LD601	0601-000517	LED-IR;RECTANGULA,4x6.0mm,75mW,6V,950	
PT601	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
PT602	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
Q602	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
R602	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R603	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R608	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012	
R609	2001-000864	R-CARBON;56KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R610	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

Loc.No	Part No	Description ; Specification	Remark
R611	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R612	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R613	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R614	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R641	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R642	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R644	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R647	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R650	2003-000259	R-METAL OXIDE;3.9OHM,5%,2W,AE,TP,6X16MM	
R651	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R652	2001-000568	R-CARBON;27OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R654	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R655	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R656	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012	
R657	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R660	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R661	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R666	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R667	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R668	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R669	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R670	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R671	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R672	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R673	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R674	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R675	2001-000032	R-CARBON;180OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R676	2007-000738	R-CHIP;30KOHM,5%,1/10W,DA,TP,2012	
R677	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R678	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R679	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R680	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R681	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R682	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R685	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R687	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R690	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012	
R691	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R694	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R695	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R696	2003-000346	R-METAL OXIDE;620ohm,5%,1W,AD,TP,4.3x12m	
R697	2003-000346	R-METAL OXIDE;620ohm,5%,1W,AD,TP,4.3x12m	
S601	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
S602	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
SW601	AC34-20100A	SWITCH-MODE;-,-,X-9,-	
SW602	AC34-20100B	SWITCH-REC;-,-,X-9,-	
XT601	2801-003318	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAP,12.5	
XT602	2801-003139	CRYSTAL-UNIT;8MHz,50ppm,28-AAA,22pF,80oh	
AUDIO/VIDEO PARTS			
C301	2401-000652	C-AL;2.2uF,20%,50V,GP,TP,3.5x5,5	
C302	2203-000989	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
C303	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C304	2203-000683	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,-	
C306	2203-000839	C-CERAMIC,CHIP;390pF,5%,50V,NPO,TP,2012,	
C307	2203-000392	C-CERAMIC,CHIP;15pF,5%,50V,SL,TP,2012,-	
C308	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C309	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C310	2401-000407	C-AL;10uF,20%,16V,GP,TP,3.5x5,2.5	
C311	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C312	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,NPO,TP,2012	
C313	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C314	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C315	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C316	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C318	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	

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C320	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C321	2401-000407	C-AL;10uF,20%,16V,GP,TP,3.5x5,2.5	
C322	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C323	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C324	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C325	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C326	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C327	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C328	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C329	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C330	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C331	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C332	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C333	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C334	2203-000989	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
C335	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C336	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C337	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
C338	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C339	2203-000989	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
C340	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
C341	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C342	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C343	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C345	2203-001088	C-CERAMIC,CHIP;5pF,0.25pF,50V,NPO,TP,201	
C346	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C347	2203-001077	C-CERAMIC,CHIP;0.056nF,5%,50V,NPO,TP,201	
C348	2203-001077	C-CERAMIC,CHIP;0.056nF,5%,50V,NPO,TP,201	
C349	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
C350	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C370	2401-000407	C-AL;10uF,20%,16V,GP,TP,3.5x5,2.5	
C380	2203-000316	C-CERAMIC,CHIP;120pF,5%,50V,NPO,TP,2012,	
C381	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C382	2203-001245	C-CERAMIC,CHIP;82pF,5%,50V,NPO,TP,2012,-	
C390	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C391	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C392	2203-000634	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,-	
C393	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C394	2203-001592	C-CERAMIC,CHIP;1NF,5%,50V,X7R,TP,2012	
C3A01	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C3A02	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C3A04	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C3A06	2203-000374	C-CERAMIC,CHIP;15nF,10%,50V,X7R,TP,2012,	
C3A07	2203-000374	C-CERAMIC,CHIP;15nF,10%,50V,X7R,TP,2012,	
C3A08	2203-001105	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,2012	
C3A09	2203-001105	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,2012	
C3A10	2203-001214	C-CERAMIC,CHIP;8.2nF,10%,50V,X7R,TP,2012	
C3A11	2301-000392	C-FILM,PEF;15nF,5%,50V,TP,6.5x8.5x3.2mm,	
C3A12	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C3A13	2203-000323	C-CERAMIC,CHIP;12NF,10%,50V,X7R,TP,2012,	
C3A14	2203-001105	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,2012	
C3A15	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C3A16	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C3A17	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C3A18	2203-001592	C-CERAMIC,CHIP;1NF,5%,50V,X7R,TP,2012	
C3A21	2203-001702	C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012	
C3A23	2401-001169	C-AL;33UF,20%,16V,GP,-,6.3X7,2.5MM	
C3A24	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C3A25	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C3A29	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A30	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C3A40	2201-000642	C-CERAMIC,DISC;680pF,10%,50V,Y5P,TP,5x3,	
C3A50	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C3D01	2301-000283	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C3D02	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C3D03	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	

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C3D04	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
C3D05	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C3Q1	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C3Q2	2203-000818	C-CERAMIC,CHIP;0.033nF,5%,50V,NPO,TP,201	
C3Q3	2203-001088	C-CERAMIC,CHIP;5pF,0.25pF,50V,NPO,TP,201	
CN301	3708-000391	CONNECTOR-FPC/FC/PIC;10P,1.25MM,STRAIGHT	
CN3A01	3708-001302	CONNECTOR-FPC/FC/PIC;7P,1.25mm,STRAIGHT,	
CN3A02	3711-002445	CONNECTOR-HEADER;BOX,2P,2R,1.5MM,STRAIGH	
D302	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D3X1	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D3X2	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
FL3A01	AC27-80100A	COIL-OSC;126QN-K5272YHC=K,-,AM	
FL3D01	AC27-82001C	COIL-BIAS OSC;B02,W(TOKO)VX1850,-	
IC301	1204-001403	IC-VIDEO PROCESS;LA71570M,QFP,100P,-,PLA	
L301	2701-000206	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	
L302	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L303	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L304	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L305	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L306	2701-000119	INDUCTOR-AXIAL;120UH,5%,2.4X3.4MM	
L310	2702-000106	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3A01	2702-000120	INDUCTOR-RADIAL;15mH,5%,6.2x7.4mm	
L3A02	2702-000106	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3A03	2702-000106	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3A04	2702-000120	INDUCTOR-RADIAL;15mH,5%,6.2x7.4mm	
L3D01	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L3Q1	2701-000206	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	
L3Q2	2701-000131	INDUCTOR-AXIAL;15UH,5%,2.4X3.4MM	
Q301	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
Q302	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q303	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q304	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q308	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q309	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q311	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3A01	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3A02	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
Q3A03	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3A04	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3A05	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3A06	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3D01	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3D02	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	
Q3D03	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
Q3Q1	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3Q2	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3Q3	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3Q4	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3Q5	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	
Q3X1	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
Q3X2	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
Q3X3	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
R301	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	
R302	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R303	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R304	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R306	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	
R307	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R308	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R309	2007-000859	R-CHIP;4.3KOHM,5%,1/10W,DA,TP,2012	
R311	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R312	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012	
R313	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R314	2007-001118	R-CHIP;680OHM,5%,1/10W,DA,TP,2012	
R315	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R316	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	

Loc.No	Part No	Description ; Specification	Remark
R317	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R318	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R320	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R321	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R322	2007-000457	R-CHIP;18KOHM,5%,1/10W,DA,TP,2012	
R325	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R326	2007-001001	R-CHIP;510OHM,5%,1/10W,DA,TP,2012	
R327	2007-001001	R-CHIP;510OHM,5%,1/10W,DA,TP,2012	
R328	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R329	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R330	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R331	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R332	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R333	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R334	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R335	2001-000800	R-CARBON;5.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R336	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	
R339	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R341	2007-001208	R-CHIP;82KOHM,5%,1/10W,DA,TP,2012	
R342	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	
R347	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R3A01	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3A04	2007-000024	R-CHIP;1.3KOHM,5%,1/10W,DA,TP,2012	
R3A05	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R3A06	2007-000401	R-CHIP;150OHM,5%,1/10W,DA,TP,2012	
R3A07	2007-000757	R-CHIP;330KOHM,5%,1/10W,DA,TP,2012	
R3A08	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R3A09	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	
R3A10	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R3A11	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R3A12	2007-000502	R-CHIP;2.2OHM,5%,1/10W,DA,TP,2012	
R3A13	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R3A14	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3A16	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R3A17	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
R3A18	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
R3A19	2001-000405	R-CARBON;180OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3A20	2007-001092	R-CHIP;620OHM,5%,1/10W,DA,TP,2012	
R3A21	2007-001092	R-CHIP;620OHM,5%,1/10W,DA,TP,2012	
R3A22	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R3A23	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	
R3A24	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R3A25	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	
R3A26	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012	
R3A28	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3A30	2001-000454	R-CARBON;2.2MOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3A32	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3A37	2007-001141	R-CHIP;7.5KOHM,5%,1/10W,DA,TP,2012	
R3A40	2007-000844	R-CHIP;3KOHM,5%,1/10W,DA,TP,2012	
R3D01	2007-000947	R-CHIP;47OHM,5%,1/10W,DA,TP,2012	
R3D02	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R3D03	2007-000881	R-CHIP;4.7OHM,5%,1/10W,DA,TP,2012	
R3Q1	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	
R3Q2	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R3Q3	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R3Q4	2007-001055	R-CHIP;6.2KOHM,5%,1/10W,DA,TP,2012	
R3Q5	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R3Q6	2007-000258	R-CHIP;1.6KOHM,5%,1/10W,DA,TP,2012	
R3Q7	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R3Q8	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R3Q9	2007-001155	R-CHIP;750OHM,5%,1/10W,DA,TP,2012	
R3X1	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R3X2	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R3X3	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R3X4	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R3X5	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	

Loc.No	Part No	Description ; Specification	Remark
XT302	2801-003610	CRYSTAL-UNIT;3.579545MHz,8ppm,28-AAA,S,1	
XT3X1	2801-001397	CRYSTAL-UNIT;4.433619MHZ,HC-49/U-S 15PPM	
XT3X2	2801-001391	CRYSTAL-UNIT;3.575611MHz,15ppm,28-AAM,S,	
TM-BLOCK			
C402	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C403	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C404	2401-001085	C-AL;330NF,20%,50V,GP,-,5X9,2MM	
C405	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C407	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C408	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C409	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C410	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C411	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
D401	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
L401	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L402	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
R401	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R402	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R403	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R404	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R405	2001-000044	R-CARBON;1.2KOHM,5%,1/4W,AA,TP,2.4X6.4M	
R406	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	
R407	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R408	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
TM401	AC40-00001C	TM-BLOCK;(M-MULTI)	SV-5000W NTSC SYSTEM
	AC40-00001E	TM-BLOCK;(FULL-MULTI)	COMMOM
ZD401	0403-000390	DIODE-ZENER;UZP33B,33V,31.4-34.6V,1W,DO-	
HI-FI PARTS			
C501	2401-000407	C-AL;10uF,20%,16V,GP,TP,3.5x5,2.5	
C502	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C503	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C504	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
C505	2301-000381	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C506	2401-000922	C-AL;22uF,20%,16V,GP,TP,5x5,5	
C507	2401-000922	C-AL;22uF,20%,16V,GP,TP,5x5,5	
C508	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C509	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C510	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C511	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C512	2203-001665	C-CERAMIC,CHIP;560pF,10%,50V,X7R,TP,2012	
C513	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C514	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C515	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C516	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C517	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C518	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C519	2301-000381	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C520	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
C521	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C522	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C523	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C524	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
C525	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
C526	2401-001507	C-AL;47uF,20%,16V,GP,TP,6.3x5,5	
C527	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C529	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
C530	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C531	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C532	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
IC501	1204-001479	IC-AUDIO PROCESSOR;LA72634AM,QFP,64P,400	
L502	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L503	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
R501	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R502	2007-001141	R-CHIP;7.5KOHM,5%,1/10W,DA,TP,2012	

Loc.No	Part No	Description ; Specification	Remark
R503	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R504	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R505	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R506	2007-001141	R-CHIP;7.5KOHM,5%,1/10W,DA,TP,2012	
R507	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R508	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R509	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R510	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R511	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012	
R512	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R514	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R516	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R517	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R518	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R519	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R520	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R521	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R522	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R523	2007-000565	R-CHIP;220KOHM,5%,1/10W,DA,TP,2012	
R524	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R525	2007-000671	R-CHIP;2KOHM,5%,1/10W,DA,TP,2012	
R533	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R540	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R570	2001-000281	R-CARBON;1000HM,5%,1/8W,AA,TP,1.8X3.2MM	
R571	2001-000281	R-CARBON;1000HM,5%,1/8W,AA,TP,1.8X3.2MM	
SECAM PARTS			
C3S01	2203-000408	C-CERAMIC,CHIP;180pF,5%,50V,NPO,TP,2012,	
C3S02	2401-000652	C-AL;2.2uF,20%,50V,GP,TP,3.5x5,5	
C3S03	2301-000381	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S04	2301-000381	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S05	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C3S06	2203-000361	C-CERAMIC,CHIP;150pF,5%,50V,NPO,TP,2012,	
C3S07	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C3S09	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C3S11	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C3S13	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	2203-001592	C-CERAMIC,CHIP;1NF,5%,50V,X7R,TP,2012	
C3S15	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	2203-001388	C-CERAMIC,CHIP;10nF,5%,50V,X7R,TP,2012,2	
C3S19	2203-000595	C-CERAMIC,CHIP;0.22nF,5%,50V,NPO,TP,2012	
C3S20	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C3S21	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	2203-001046	C-CERAMIC,CHIP;51pF,5%,50V,NPO,TP,2012,-	
C3S25	2203-000274	C-CERAMIC,CHIP;10pF,0.25pF,50V,NPO,TP,20	
C3S27	2203-001135	C-CERAMIC,CHIP;680pF,5%,50V,SL,TP,2012,-	
IC3S01	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,	
L3S01	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L3S02	2702-000179	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm	
L3S03	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L3S04	2701-000195	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM	
Q3S01	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3S02	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S03	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	
Q3S04	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S05	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
R3S01	2001-000539	R-CARBON;24KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S02	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R3S03	2007-001224	R-CHIP;9.1KOHM,5%,1/10W,DA,TP,2012	
R3S04	2007-000615	R-CHIP;24KOHM,5%,1/10W,DA,TP,2012	
R3S05	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R3S11	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S12	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R3S13	2007-000738	R-CHIP;30KOHM,5%,1/10W,DA,TP,2012	
R3S14	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	
R3S15	2007-001141	R-CHIP;7.5KOHM,5%,1/10W,DA,TP,2012	
R3S16	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R3S17	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R3S20	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R3S21	2007-000798	R-CHIP;360OHM,5%,1/10W,DA,TP,2012	
R3S22	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S23	2001-000539	R-CARBON;24KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S24	2001-000356	R-CARBON;150KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3S26	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R3S27	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012	
602	**AC92-00226A**	**ASSY-PCB-NICAM;STEREO/BILINGUAL**	**SV-5000W NTSC SYSTEM**
	AC92-00386A	**ASSY-PCB-NICAM;A2/NICAM**	**SV-5000W PAL SYSTEM**
	AC92-00387A	**ASSY-PCB-NICAM;SV-7000W**	**SV-7000W**
C4N01	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP	
C4N02	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N03	2202-000806	C-CERAMIC,MLC-AXIAL;220pF,10%,50V,Y5P,TP	
C4N04	2401-000661	C-AL;2.2uF,20%,50V,GP,TP,5x11,5	
C4N05	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C4N06	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C4N07	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N08	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP	
C4N09	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N10	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N11	2401-002062	C-AL;3.3UF,20%,50V,GP,TP,5X11,2.5	
C4N12	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N13	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N14	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N15	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N16	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C4N17	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N18	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N19	2202-000279	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C4N21	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NPO,TP,4	
C4N22	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NPO,TP,4	
C4N23	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C4N24	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C4N25	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
CN4N01	3711-001198	CONNECTOR-HEADER;NOWALL,10P,1R,2mm,ANGLE	
CN4N02	3711-002144	CONNECTOR-HEADER;NOWALL,15P,1R,2mm,ANGLE	
CN4N03	3708-001168	CONNECTOR-FPC/FC/PIC;14P,1.25mm,ANGLE,SN	
D4N01	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N02	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
IC4N01	1204-001577	IC-AUDIO PROCESSOR;MSP3450G	SV-7000W
IC4N01	1204-001516	IC-AUDIO PROCESSOR;MSP3417DP	SV-5000W A2/NICAM
IC4N01	1204-001576	IC-AUDIO PROCESSOR;MSP3440G	SV-5000W MTS
L4N01	2701-000188	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
L4N02	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L4N03	2701-000188	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
L4N04	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
R4N01	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R4N02	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R4N03	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R4N04	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R4N05	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R4N06	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
XT4N01	2801-003171	CRYSTAL-UNIT;18.432MHz,20PPM,28-AAM,4PF,	
603	**AC92-00172A**	**ASSY-PCB-IO;,IO/OSD, SV-7000W/5000W**	
INPUT-OUTPUT PARTS			
C4301	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4302	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4303	2203-001164	C-CERAMIC,CHIP;68pF,5%,50V,SL,TP,2012,-	
C4304	2203-000335	C-CERAMIC,CHIP;12pF,5%,50V,NPO,TP,2012,-	
C4305	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	

Loc.No	Part No	Description ; Specification	Remark
C4306	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4307	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C4308	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C4309	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4310	2203-000858	C-CERAMIC,CHIP;0.039nF,5%,50V,NPO,TP,201	
C4311	2203-000634	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,-	
C4312	2203-001164	C-CERAMIC,CHIP;68pF,5%,50V,SL,TP,2012,-	
C4313	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C4314	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4315	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4316	2203-001230	C-CERAMIC,CHIP;0.82nF,5%,50V,NPO,TP,2012	
C4317	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C4318	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4319	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4321	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4322	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C4323	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C4324	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4325	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C4326	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C4327	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C4328	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C4329	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C4332	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4334	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4335	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4336	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4338	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
C4339	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
C4340	2203-001702	C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012	
C4341	2203-001702	C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012	
C4342	2203-001164	C-CERAMIC,CHIP;68pF,5%,50V,SL,TP,2012,-	
C4344	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
C4345	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
C4347	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
C4348	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
C4349	2203-001164	C-CERAMIC,CHIP;68pF,5%,50V,SL,TP,2012,-	
C4350	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4351	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4352	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C4354	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4355	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C4356	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C4357	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4358	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C4359	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4361	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C4362	2401-000407	C-AL;10uF,20%,16V,GP,TP,3.5x5,2.5	
C4363	2203-000429	C-CERAMIC,CHIP;18pF,5%,NPO,TP,2012,-	
C4364	2401-000407	C-AL;10uF,20%,16V,GP,TP,3.5x5,2.5	
C4365	2203-000244	C-CERAMIC,CHIP;100pF,5%,50V,SL,TP,2012,-	
C4366	2203-000244	C-CERAMIC,CHIP;100pF,5%,50V,SL,TP,2012,-	
C4367	2401-001905	C-AL;10uF,20%,16V,BP,BK,6x11mm,2.5m	
C4369	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4370	2203-001702	C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012	
C4371	2203-001702	C-CERAMIC,CHIP;2.2NF,5%,50V,X7R,TP,2012	
C4372	2203-000858	C-CERAMIC,CHIP;0.039nF,5%,50V,NPO,TP,201	
C4375	2203-001077	C-CERAMIC,CHIP;0.056nF,5%,50V,NPO,TP,201	
C4376	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C4377	2203-000476	C-CERAMIC,CHIP;1000NF,+80-20%,16V,Y5V,TP	
C4378	2203-000595	C-CERAMIC,CHIP;0.22nF,5%,50V,NPO,TP,2012	
CN4301	3711-002144	CONNECTOR-HEADER;NOWALL,15P,1R,2mm,ANGLE	
CN4302	3711-002144	CONNECTOR-HEADER;NOWALL,15P,1R,2mm,ANGLE	
CN4303	3711-002144	CONNECTOR-HEADER;NOWALL,15P,1R,2mm,ANGLE	
CN4305	3711-001061	CONNECTOR-HEADER;BOX,6P,1R,2mm,ANGLE,SN	
D4301	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4302	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	
D4304	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4305	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	
D4306	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	
D4307	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	
IC4301	1001-000200	IC-VIDEO SWITCH;NJM2234M,3-INPUT,SOP,8P,	
IC4302	AC14-12012W	IC-DRIVE;NJM2267D,DIP,-	
IC4303	AC14-12014D	IC-CCD;TL8828P,0.32H),DIP	
IC4304	1001-000200	IC-VIDEO SWITCH;NJM2234M,3-INPUT,SOP,8P,	
IC4305	1001-000200	IC-VIDEO SWITCH;NJM2234M,3-INPUT,SOP,8P,	
IC4306	AC14-12012W	IC-DRIVE;NJM2267D,DIP,-	
JC4301	AC37-22002H	JACK-PIN;3.2mm,DPSE-9826,3P,10mm,ARREY	
JC4302	AC37-22002H	JACK-PIN;3.2mm,DPSE-9826,3P,10mm,ARREY	
JC4303	AC37-22002H	JACK-PIN;3.2mm,DPSE-9826,3P,10mm,ARREY	
JC4304	3710-000479	CONNECTOR-SOCKET;	
L4302	2701-000138	INDUCTOR-AXIAL;18UH,5%,2.4X3.4MM	
L4303	2701-000206	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	
L4304	2701-000117	INDUCTOR-AXIAL;10uH,5%,2.4x3.4mm	
L4307	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L4308	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L4309	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L4310	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4311	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4312	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4313	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4314	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
L4315	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4316	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4317	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4318	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4330	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L4331	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
Q4301	0504-000129	TR-DIGITAL;KSR1104,NPN,200MW,47K/47K,SOT	
Q4302	0501-000344	TR-SMALL SIGNAL;KSC1623-G,NPN,200mW,SOT-	
Q4303	0501-000312	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	
Q4304	0501-000344	TR-SMALL SIGNAL;KSC1623-G,NPN,200mW,SOT-	
Q4305	0501-000312	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	
Q4306	0504-000128	TR-DIGITAL;-,NPN,200MW,22K/22K,SOT-23,TP	
Q4307	0504-000128	TR-DIGITAL;-,NPN,200MW,22K/22K,SOT-23,TP	
Q4308	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	
Q4310	0504-000129	TR-DIGITAL;KSR1104,NPN,200MW,47K/47K,SOT	
Q4311	0501-000344	TR-SMALL SIGNAL;KSC1623-G,NPN,200mW,SOT-	
R4301	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R4302	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R4303	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R4304	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R4305	2007-000024	R-CHIP;1.3KOHM,5%,1/10W,DA,TP,2012	
R4306	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	
R4307	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R4308	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R4309	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R4310	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R4311	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
R4312	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
R4313	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R4314	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R4315	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R4316	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R4317	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R4318	2001-000116	R-CARBON;820OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R4328	2007-000401	R-CHIP;150OHM,5%,1/10W,DA,TP,2012	
R4329	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	
R4330	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	
R4331	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4332	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4333	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	

Loc.No	Part No	Description ; Specification	Remark
R4338	2007-000565	R-CHIP;220KOHM,5%,1/10W,DA,TP,2012	
R4339	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4340	2007-000565	R-CHIP;220KOHM,5%,1/10W,DA,TP,2012	
R4341	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4342	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	
R4343	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4344	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4345	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4346	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4347	2007-001201	R-CHIP;820OHM,5%,1/10W,DA,TP,2012	
R4348	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R4349	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R4350	2007-000030	R-CHIP;560OHM,5%,1/10W,DA,TP,2012	
R4351	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R4352	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R4353	2007-000615	R-CHIP;24KOHM,5%,1/10W,DA,TP,2012	
R4354	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R4355	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R4356	2007-000002	R-CHIP;75KOHM,5%,1/10W,DA,TP,2012	
R4360	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4361	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012	
R4362	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012	
R4363	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012	
R4364	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012	
R4365	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R4366	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
VR4301	2103-000230	VR-SEMI;2.2Kohm,30%,1/10W,SIDE	
XT4301	2801-001384	CRYSTAL-UNIT;14.31818MHz,30ppm,28-AAA,16	
ZD4301	0403-000339	DIODE-ZENER;UZ3.0B,3.0V,2.8-3.2V,500mW,D	
O.S.D. PARTS			
C903	2203-000683	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,-	
C904	2203-000683	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,-	
C905	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C906	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C907	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C908	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C909	2203-001002	C-CERAMIC,CHIP;0.047nF,5%,50V,NPO,TP,201	
C910	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C911	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C912	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C913	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C915	2203-001064	C-CERAMIC,CHIP;56nF,10%,50V,NPO,TP,2012,	
C916	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
C917	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
C918	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
C931	2301-000365	C-FILM,PEF;1.5nF,10%,50V,TP,5.5x7x2.8mm,	
C932	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C933	2301-000402	C-FILM,PEF;1nF,5%,50V,TP,5x7x2.8mm,5mm	
C934	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C935	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C936	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
C937	2301-000415	C-FILM,PEF;22nF,5%,50V,TP,6.5x10.5x4mm,5	
C940	2203-000361	C-CERAMIC,CHIP;150pF,5%,50V,NPO,TP,2012,	
C941	2203-001088	C-CERAMIC,CHIP;5pF,0.25pF,50V,NPO,TP,201	
C942	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,201	
C943	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,TP,2012	
D901	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D902	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D903	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
IC901	AC09-00050A	IC-OSD;LC74776M-9776,30P,ROLE,-,-,MFP	
IC902	AC14-12002F	IC;NJM2229S,-,-	
L901	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L902	2701-000160	INDUCTOR-AXIAL;22UH,5%,2.4X3.4MM	
L903	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
Q901	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	

Loc.No	Part No	Description ; Specification	Remark
Q902	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q903	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q904	0504-000128	TR-DIGITAL;-,NPN,200MW,22K/22K,SOT-23,TP	
Q905	0504-000128	TR-DIGITAL;-,NPN,200MW,22K/22K,SOT-23,TP	
Q906	0504-000128	TR-DIGITAL;-,NPN,200MW,22K/22K,SOT-23,TP	
Q907	0501-000344	TR-SMALL SIGNAL;KSC1623-G,NPN,200mW,SOT-	
R901	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R902	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R903	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R904	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	
R905	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
R906	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
R907	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
R908	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R909	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R910	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R911	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R912	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R913	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R914	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R915	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R916	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R917	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R918	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R932	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R933	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R934	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R935	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R936	2007-001124	R-CHIP;68KOHM,1%,1/10W,DA,TP,2012	
R937	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
R938	2007-001113	R-CHIP;680KOHM,5%,1/10W,DA,TP,2012	
R939	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
XT901	2801-003311	CRYSTAL-UNIT;17.734475MHz,20ppm,28-AAA,1	
XT902	2801-001384	CRYSTAL-UNIT;14.31818MHz,30ppm,28-AAA,16	
604	**AC92-00225A**	**ASSY-PCB-DIGITAL;DIGITAL, SV-7000W/5000W**	
CD1	2203-001721	C-CERAMIC,CHIP;360pF,5%,50V,NPO,TP,2012,	
CD10	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
CD11	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD12	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
CD13	2203-000555	C-CERAMIC,CHIP;20pF,5%,50V,NPO,TP,2012,-	
CD14	2203-000555	C-CERAMIC,CHIP;20pF,5%,50V,NPO,TP,2012,-	
CD15	2203-000735	C-CERAMIC,CHIP;300pF,5%,50V,NPO,TP,2012,	
CD16	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD17	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD18	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD19	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD2	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD20	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD21	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD22	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD24	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD25	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD26	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD27	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD28	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD29	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD3	2203-001077	C-CERAMIC,CHIP;0.056nF,5%,50V,NPO,TP,201	
CD30	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD31	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD32	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD33	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD34	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD35	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD36	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD37	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	

Loc.No	Part No	Description ; Specification	Remark
CD38	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD39	2401-000847	C-AL;220UF,20%,35V,GP,TP,10X12MM,5M	
CD4	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
CD40	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD41	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD42	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD43	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
CD44	2203-001002	C-CERAMIC,CHIP;0.047nF,5%,50V,NPO,TP,201	
CD45	2203-000555	C-CERAMIC,CHIP;20pF,5%,50V,NPO,TP,2012,-	
CD46	2203-000735	C-CERAMIC,CHIP;300pF,5%,50V,NPO,TP,2012,	
CD47	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD48	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD49	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD5	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
CD50	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD51	2203-000735	C-CERAMIC,CHIP;300pF,5%,50V,NPO,TP,2012,	
CD52	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD53	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD54	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
CD55	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD56	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD57	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD6	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD60	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
CD61	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
CD63	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
CD64	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
CD65	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
CD7	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD8	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CD9	2203-000206	C-CERAMIC,CHIP;100nF,10%,50V,X7R,TP,2012	
CND1	3708-001167	CONNECTOR-FPC/FC/PIC;14P,1.25mm,STRAIGHT	
CND2	3711-001061	CONNECTOR-HEADER;BOX,6P,1R,2mm,ANGLE,SN	
CND2B	AC39-00026A	LEAD CONNECTOR-ASSY;-,51004,60-9073-3018	
ICD1	1204-001573	IC-VIDEO PROCESS;SAA7113H,QFP,44P,393MIL	
ICD2	1204-001366	IC-VIDEO ENCODER;SAA7128,QFP,44P,-,PLAST	
ICD3	AC09-00059A	IC-VIDEO SIG. CONVERTER;VIDEO CONVERSION	
ICD4	1105-001259	IC-DRAM;416S1020,16BIT,TSOP,50P,400MIL	
ICD5	AC14-12012W	IC-DRIVE;NJM2267D,DIP,-	
ICD6	1203-001586	IC-VOLTAGE REGULATOR;278R33,TO-220F,4P,-	
ICD7	1203-001586	IC-VOLTAGE REGULATOR;278R33,TO-220F,4P,-	
ICD8	AC14-12004U	IC-FP;NJM 2235M(TE1),-,-	
LD1	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
LD10	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
LD11	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
LD12	2702-000112	INDUCTOR-RADIAL;10uH,5%,6x6.4mm	
LD13	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
LD16	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
LD17	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
LD18	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
LD19	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
LD2	2701-000105	INDUCTOR-AXIAL;1.5uH,10%,2.5x3.4mm	
LD3	2702-000112	INDUCTOR-RADIAL;10uH,5%,6x6.4mm	
LD4	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
LD5	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
LD6	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
LD7	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
LD8	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
LD9	2702-000135	INDUCTOR-RADIAL;2.7uH,10%,6x6.4mm	
RD1	2007-000028	R-CHIP;39OHM,5%,1/10W,DA,TP,2012	
RD10	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
RD11	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD12	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
RD13	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
RD14	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
RD15	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	
RD16	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	
RD17	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	
RD18	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012	
RD19	2007-000002	R-CHIP;75KOHM,5%,1/10W,DA,TP,2012	
RD2	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
RD20	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD21	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012	
RD22	2007-000030	R-CHIP;560OHM,5%,1/10W,DA,TP,2012	
RD23	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012	
RD24	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
RD26	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD27	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD28	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD29	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD3	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
RD30	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD31	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD32	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
RD33	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD34	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD35	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD36	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD37	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD38	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD39	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD4	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
RD40	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012	
RD41	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
RD42	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
RD43	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
RD44	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
RD5	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
RD6	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
RD7	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
RD8	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
RD9	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
XD1	2801-003819	CRYSTAL-UNIT;24.576MHZ,10PPM,28-AAA,16PF	
XD2	2801-003348	CRYSTAL-UNIT;27MHZ,20PPM,28-AAM,20PF,20O	
701	**AC92-00214A**	**ASSY-PCB-TIMER;SV-7000W**	
C701	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C702	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C703	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C704	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C705	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C706	2202-000807	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C707	2202-000243	C-CERAMIC,MLC-AXIAL;33pF,5%,50V,SL,TP,3.	
C711	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C712	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C713	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C714	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C715	2201-000681	C-CERAMIC,DISC;82pF,5%,50V,SL,TP,5x3,5	
C716	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
CN701	3710-001145	CONNECTOR-SOCKET;20P,1R,1.5mm,STRAIGHT,S	
CN703	3711-002597	CONNECTOR-HEADER;NOWALL,9P,2R,1.5mm,STRA	
CN704	3711-002597	CONNECTOR-HEADER;NOWALL,9P,2R,1.5mm,STRA	
D701	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D702	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D703	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D704	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D705	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D710	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
DT701	AC07-20050Y	VF-DISPLAY;SVV-12MM09,16SEG,103 X 13.25,	
IC701	1003-001039	IC-VFD;UPD16311GC-AB6,QFP,52P,-,-,-40	
JK701	3722-000438	JACK-PIN;1P/1C,PI3.3,SN,YEL,-	
JK702	AC37-22001T	JACK-PIN;DSPS-8805-03W,PI4,3P,GLD,-	

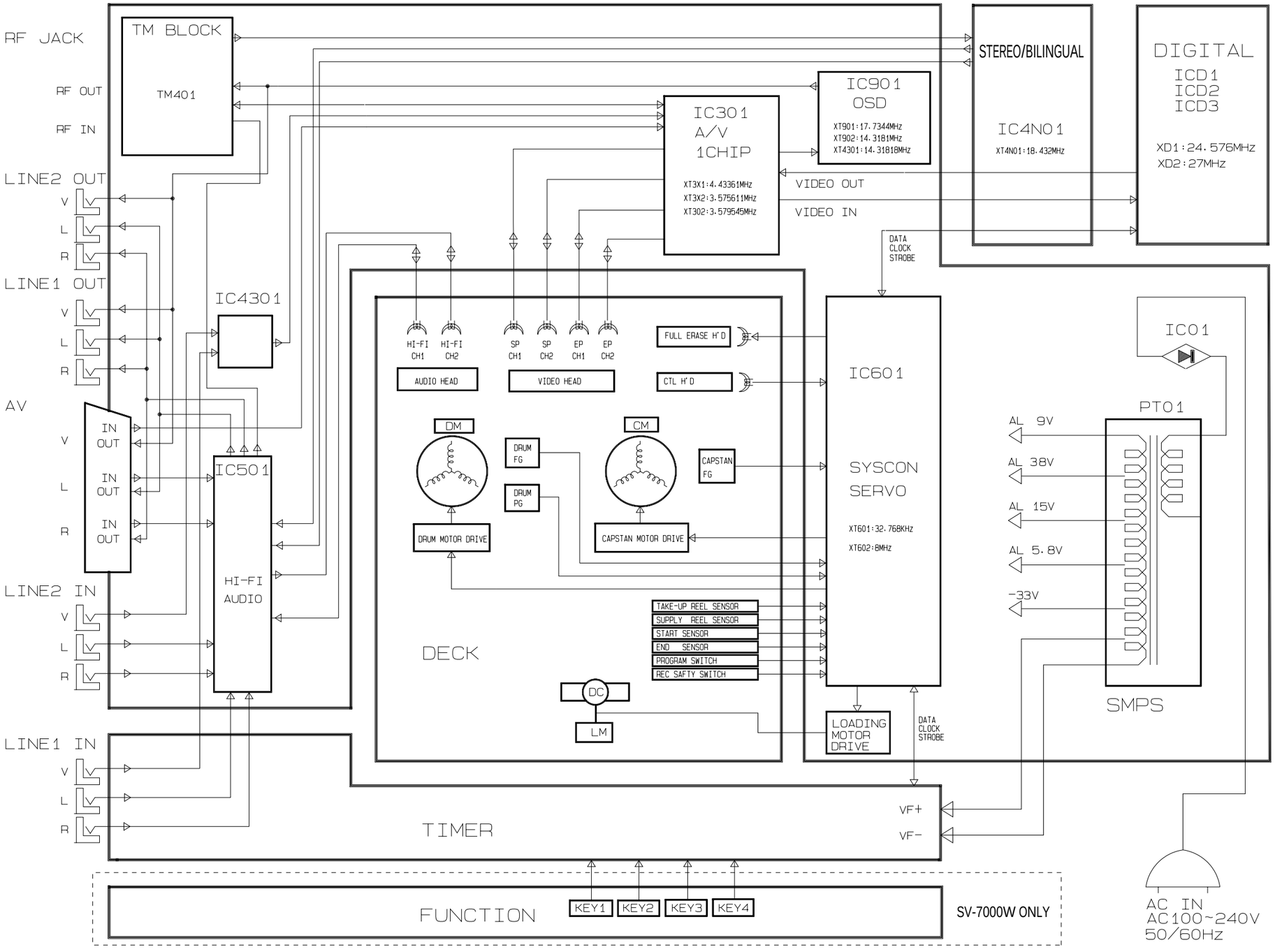
Loc.No	Part No	Description ; Specification	Remark
JK703	3722-000435	JACK-PIN;1P/1C,PI3.3,SN,RED,-	
JK70A	AC61-12298A	BRACKET-JACK;SPTE,-,T0.5,-,-,-,-,-,-	
L701	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L702	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L703	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
LD701	0601-001201	LED;ROUND,RED,3mm,635nm	
Q701	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
R701	2001-000333	R-CARBON;12OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R702	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R703	2001-000036	R-CARBON;330OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R704	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R705	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R706	2001-000864	R-CARBON;56KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R707	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R708	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R709	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R710	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R711	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R712	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R713	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R714	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R715	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R716	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R717	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R718	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R719	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R720	2001-000325	R-CARBON;120OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RM701	AC59-60060A	MODULE-REMOCON;GP1U281R,SHARP,38KHZ,-,-,	
SW701	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW702	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW703	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW704	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW705	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW706	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW707	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW708	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW709	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW710	3408-000261	SWITCH-SLIDE;50V,300mA,-,-	
SW711	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
ZD701	0403-000357	DIODE-ZENER;UZ5.6BM,5.6V,5.4-5.8V,500mW,	
ZD702	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500m	
701	**AC92-00239A**	**ASSY-PCB-F/TIMER;SV-5000W**	
C701	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C702	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C703	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C704	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C705	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C706	2202-000807	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C707	2202-000243	C-CERAMIC,MLC-AXIAL;33pF,5%,50V,SL,TP,3.	
C711	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C712	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C713	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C715	2201-000681	C-CERAMIC,DISC;82pF,5%,50V,SL,TP,5x3,5	
C716	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C717	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
CN701	3710-001145	CONNECTOR-SOCKET;20P,1R,1.5mm,STRAIGHT,S	
D701	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D702	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D703	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D704	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D705	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D706	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D707	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D708	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
DT701	AC07-20050Y	VF-DISPLAY;SVV-12MM09,16SEG,103 X 13.25,	

Loc.No	Part No	Description ; Specification	Remark
IC701	1003-001039	IC-VFD;UPD16311GC-AB6,QFP,52P,-,-,-40	
IC702	AC14-12001X	IC;M5481,-,-	
JK701	AC37-22002G	JACK-PIN;3.2mm,DPSE-9813,3P,13mm,ARREY	
L701	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L702	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L703	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
LD701	0601-001201	LED;ROUND,RED,3mm,635nm	
LD702	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD703	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD704	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD705	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD706	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD707	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
Q701	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
R701	2001-000333	R-CARBON;12OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R702	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R703	2001-000036	R-CARBON;330OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R704	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R705	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R706	2001-000864	R-CARBON;56KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R707	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R708	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R709	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R710	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R711	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R712	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R713	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R714	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R715	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R716	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R717	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R718	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R719	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R720	2001-000832	R-CARBON;5100HM,5%,1/8W,AA,TP,1.8X3.2MM	
R721	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R722	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R723	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R724	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R725	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R726	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R727	2001-000302	R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RM701	AC59-60060A	MODULE-REMOCON;GP1U281R,SHARP,38KHZ,-,-,	
SW701	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW702	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW703	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW704	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW705	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW706	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW707	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW708	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW709	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW710	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW711	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW712	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW713	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW714	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW715	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW716	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW717	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW718	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
ZD701	0403-000357	DIODE-ZENER;UZ5.6BM,5.6V,5.4-5.8V,500mW,	
ZD702	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500m	
ZD703	0403-000558	DIODE-ZENER;MTZ5.6C,5.6V,5.61-5.91V,500m	
ZD704	0403-000558	DIODE-ZENER;MTZ5.6C,5.6V,5.61-5.91V,500m	
ZD705	0403-000558	DIODE-ZENER;MTZ5.6C,5.6V,5.61-5.91V,500m	

Loc.No	Part No	Description ; Specification	Remark
-	-	**ASSY-FUNCTION;SV-7000W ONLY**	**S.N.A.**
C802	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
CN801	3708-000204	CONNECTOR-FPC/FC/PIC;20P,1.25mm,ANGLE,SN	
D801	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D802	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D803	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
F/CABL	3809-001100	CABLE-FLAT;30V,80C,60mm,20P,1.25mm,UL289	
IC801	AC14-12001X	IC;M5481,-,-	
LD801	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD802	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD803	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD804	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD805	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD806	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD807	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD808	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD811	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD812	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD813	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD814	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD815	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
LD816	0601-000497	LED;ROUND,GRN,3.1mm,565nm	
R801	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R802	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R803	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R804	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R805	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R806	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R807	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R808	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R809	2001-000302	R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R811	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R812	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R813	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R814	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R815	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R816	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
SW801	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW802	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW803	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW804	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW805	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW806	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW807	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW808	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW809	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW810	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW811	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW812	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW813	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW814	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW815	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW816	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW817	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW818	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW819	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW820	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
ZD801	0403-000558	DIODE-ZENER;MTZ5.6C,5.6V,5.61-5.91V,500m	
ZD802	0403-000558	DIODE-ZENER;MTZ5.6C,5.6V,5.61-5.91V,500m	
ZD803	0403-000558	DIODE-ZENER;MTZ5.6C,5.6V,5.61-5.91V,500m	
-	-	**ASSY-JOINT;SV-7000W ONLY**	**S.N.A.**
CN8J00	3708-000209	CONNECTOR-FPC/FC/PIC;20P,1.25mm,	
CN8J01	3710-000531	CONNECTOR-HEADER;9P,1R,1.5MM,STRAIGHT,SN	
CN8J02	3710-000531	CONNECTOR-HEADER;9P,1R,1.5MM,STRAIGHT,SN¡	

Loc.No	Part No	Description ; Specification	Remark

9. Block Diagram



MEMO

10. PCB Diagrams

10-1 Main ---------- 10-2

10-2 Digital ---------- 10-3

10-3 A2/NICAM ---------- 10-3

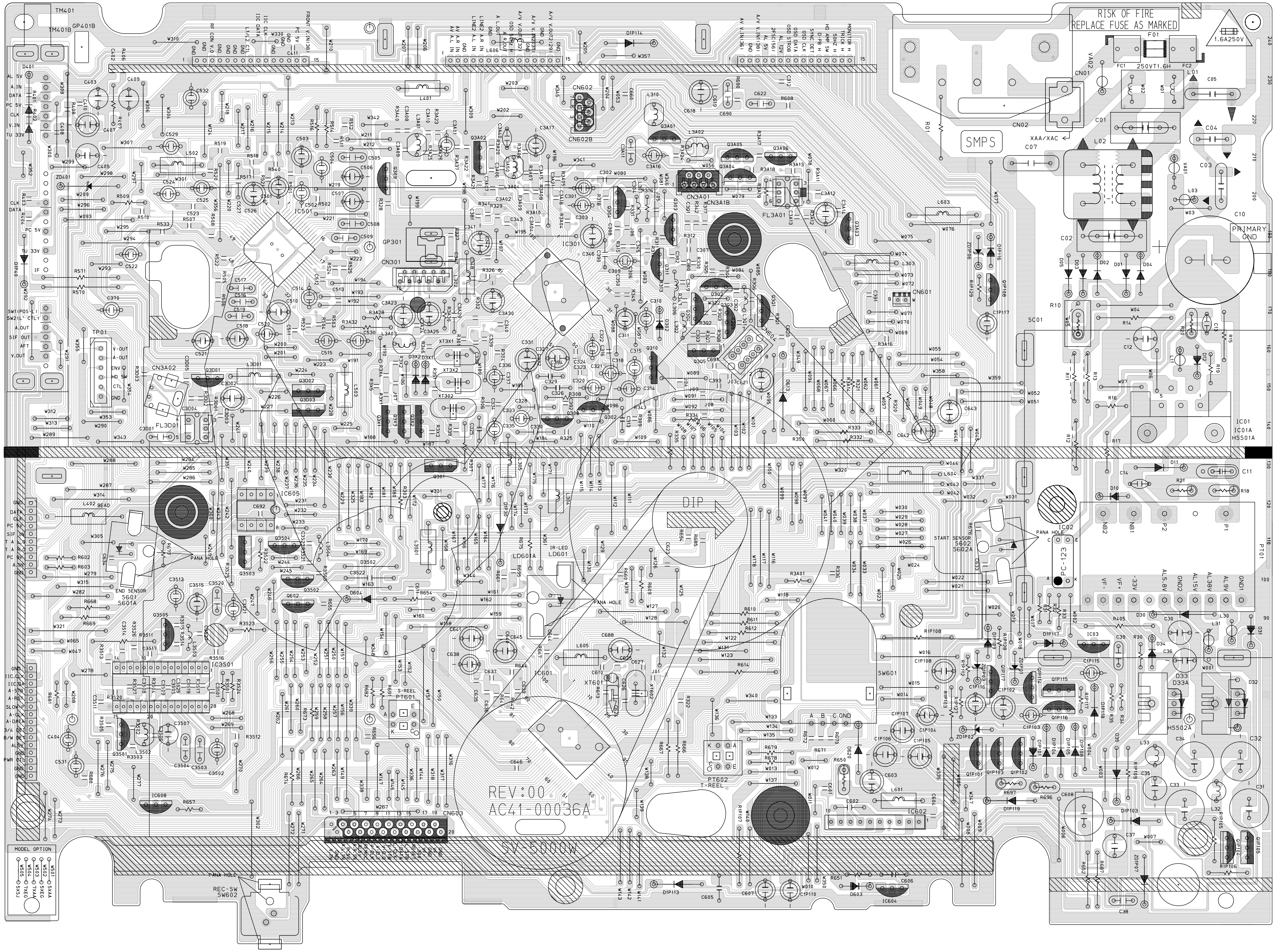
10-4 I/O ---------- 10-4

10-5 Timer (SV-7000W) ---------- 10-5

10-6 Function (SV-7000W) ---------- 10-5

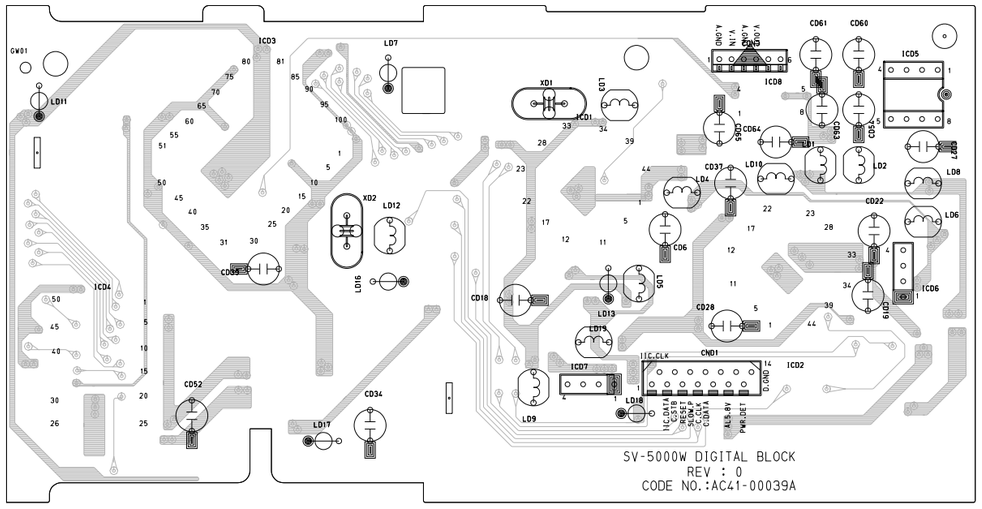
10-7 Function-Timer (SV-5000W) ---------- 10-6

10-1 Main

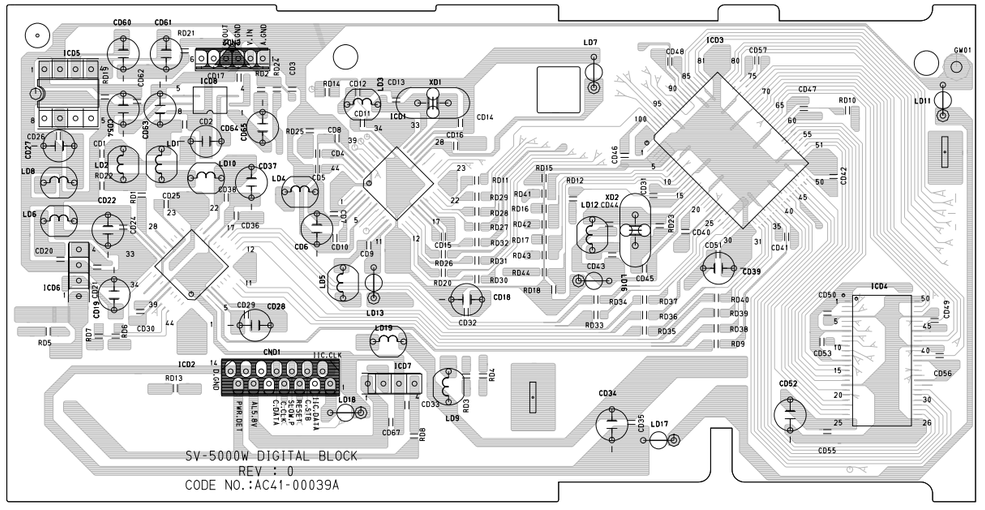

RISK OF FIRE
REPLACE FUSE AS MARKED
1.6A250V
250VT1.6H
SMPS
PRIMARY GND
DIP
REV:00
AC41-00036A
SV-5000W
MODEL OPTION
END SENSOR
START SENSOR
PANA HOLE
REC-SW
S-REEL
T-REEL
IR-LED

10-2 Digital

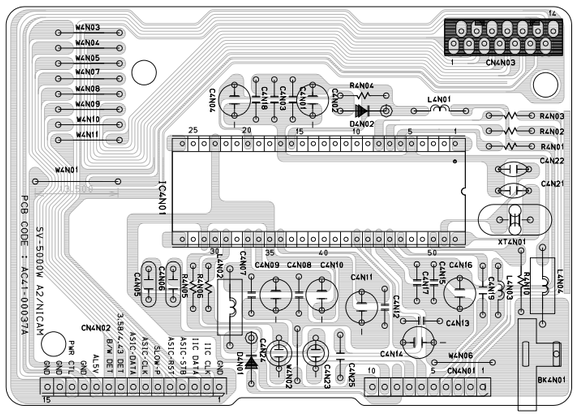
COMPONENT SIDE



SOLDER SIDE

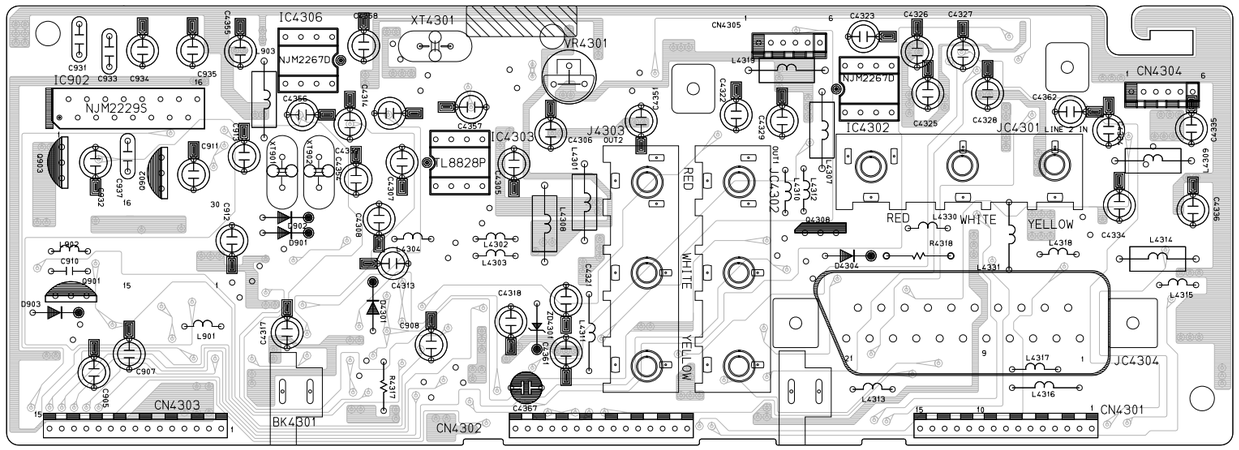


10-3 A2/NICAM

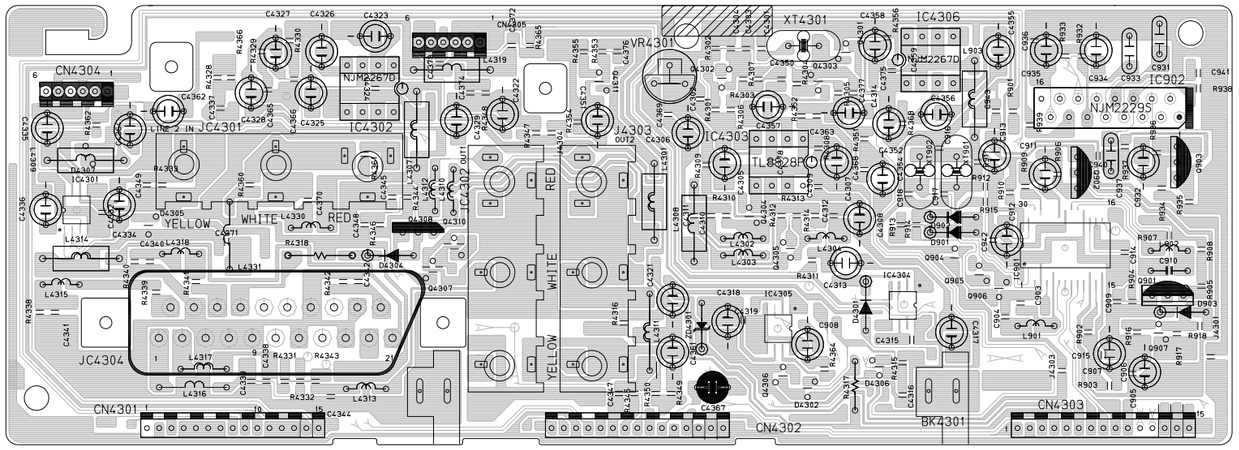


10-4 I/O

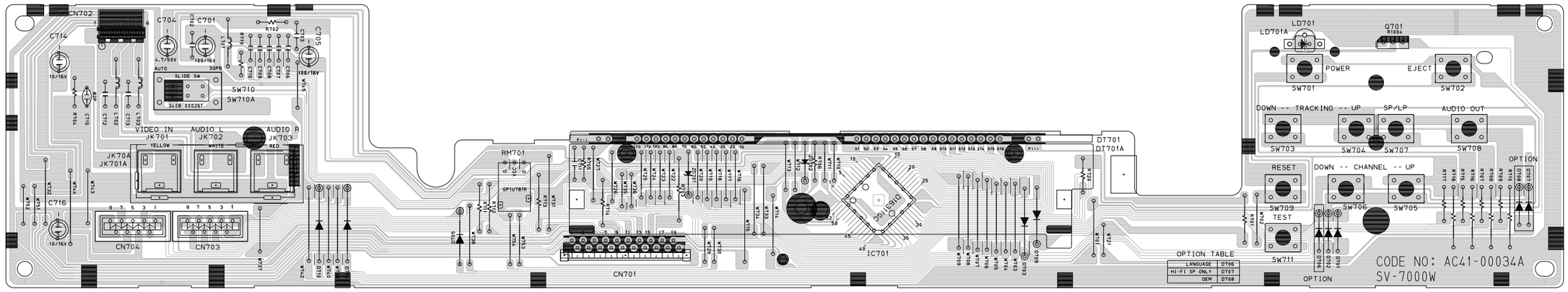
COMPONENT SIDE



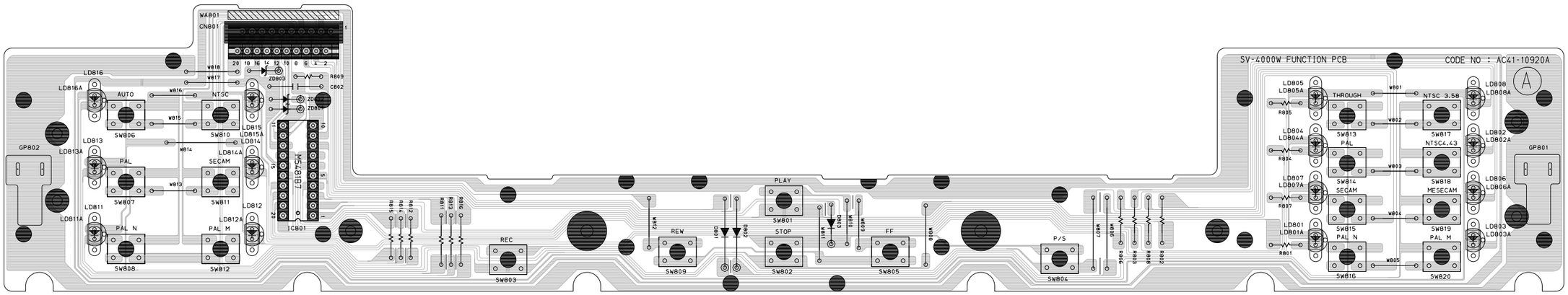
SOLDER SIDE



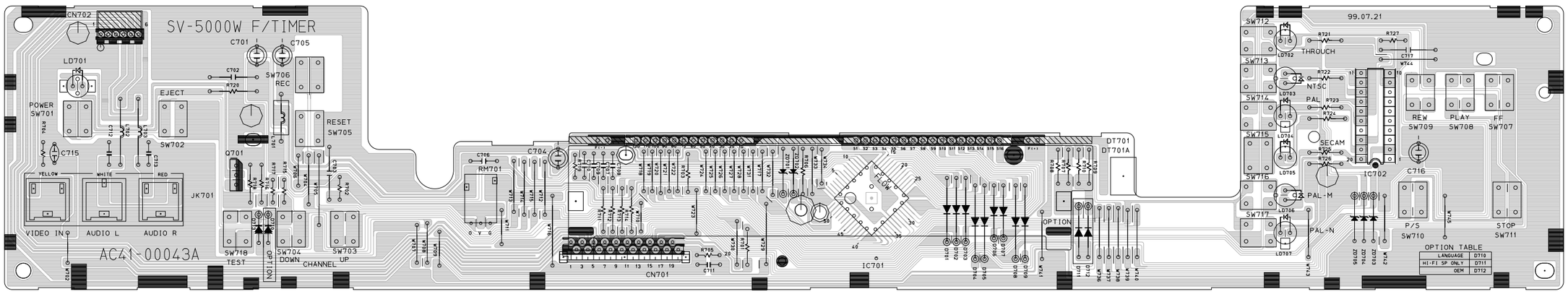
10-5 Timer (SV-7000W)



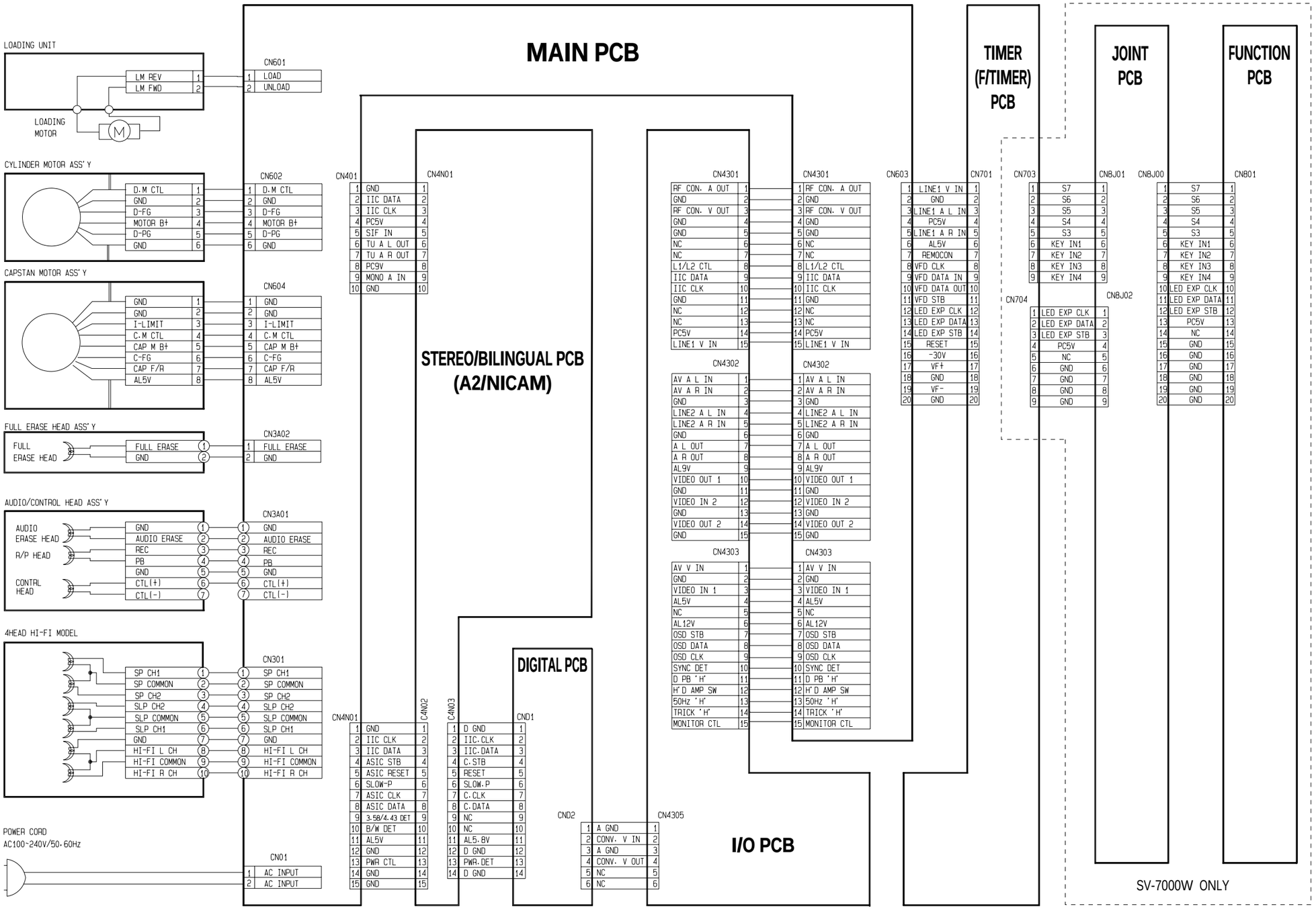
10-6 Function (SV-7000W)



10-7 Function-Timer (SV-5000W)



11. Wiring Diagram



MEMO

12. Schematic Diagrams

◆ Block Identification of Main PCB - 12-2

12-1 S.M.P.S. - 12-3

12-2 Power - 12-4

12-3 System Control/Servo - 12-5

12-4 Audio/Video - 12-6

12-5 Hi-Fi - 12-7

12-6 TM-Block - 12-8

12-7 Stereo/Bilingual (A2/NICAM) - 12-9

12-8 SECAM - 12-10

12-9 Digital - 12-11

12-10 O.S.D. - 12-12

12-11 Input-Output - 12-13

12-12 Timer (SV-7000W) - 12-14

12-13 Function/Joint (SV-7000W) - 12-15

12-14 Function-Timer (SV-5000W) - 12-16

12-15 Remote Control - 12-17

Note

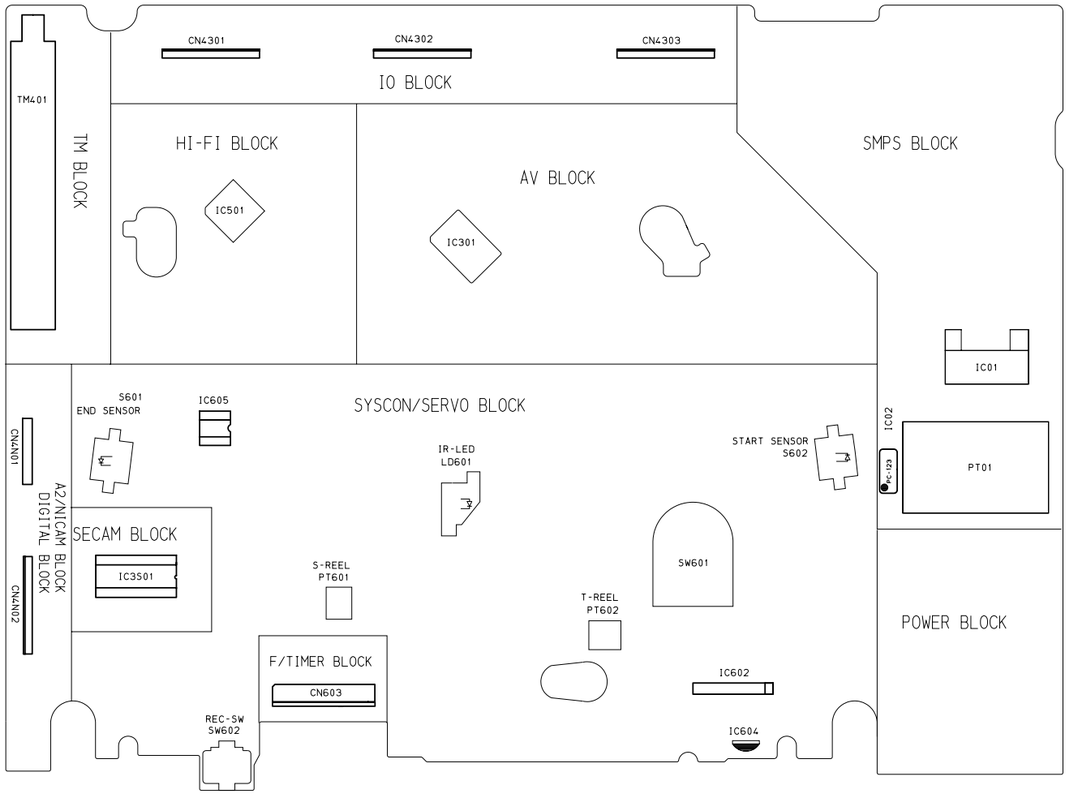
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the “electrostatically sensitive (ES) devices” section of this service manual.

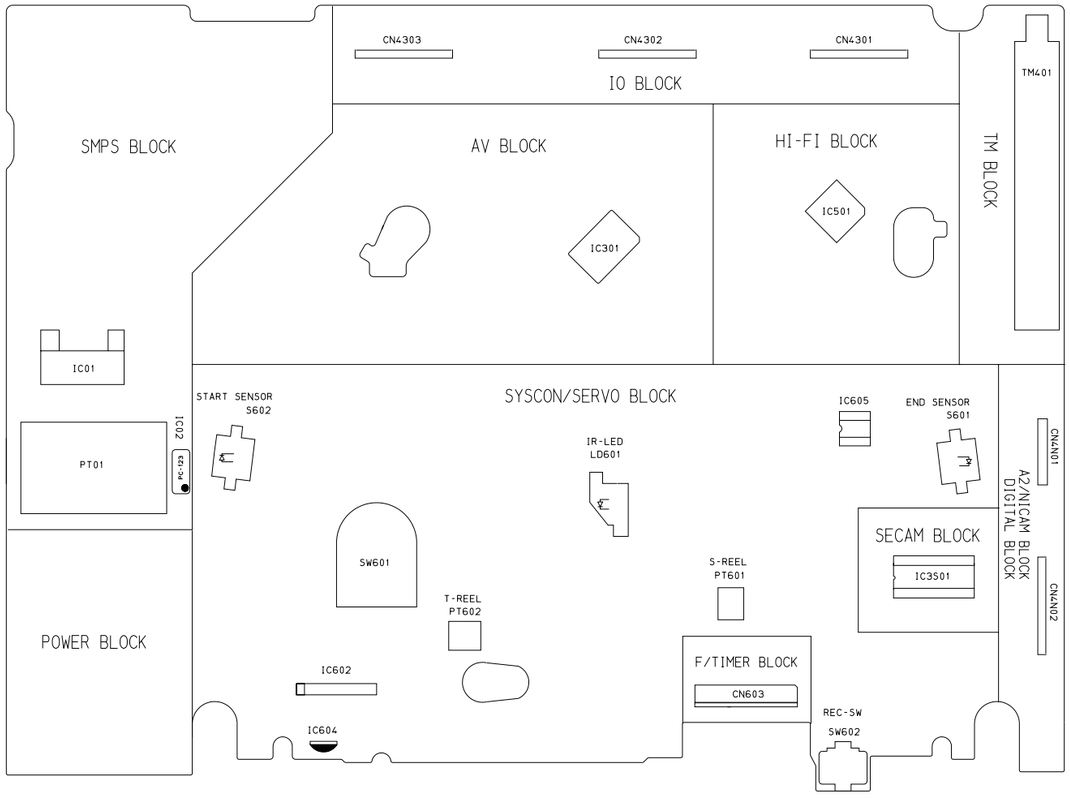
Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components.
Use only the same type.

◆ Block Identification of Main PCB

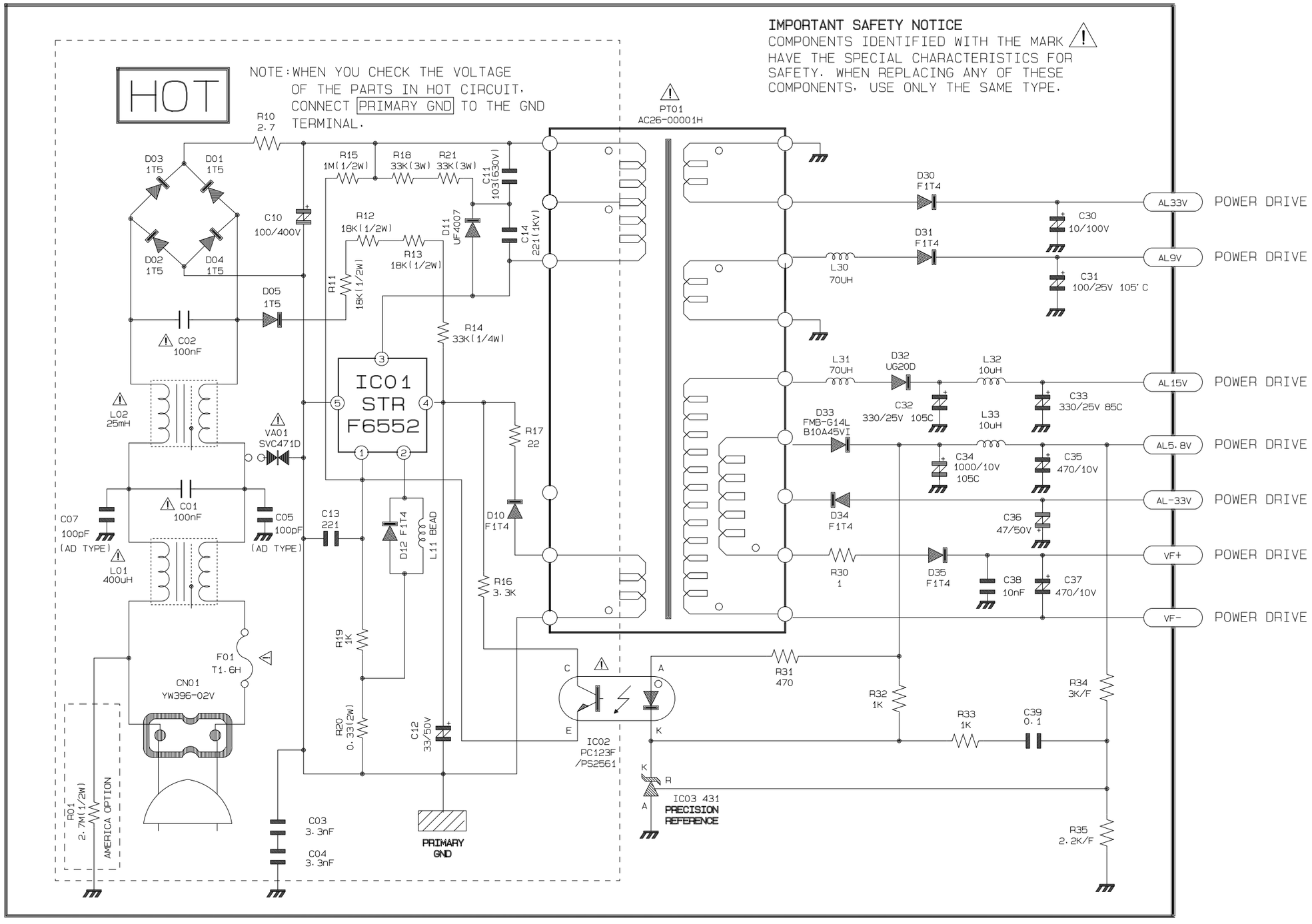


Component Side

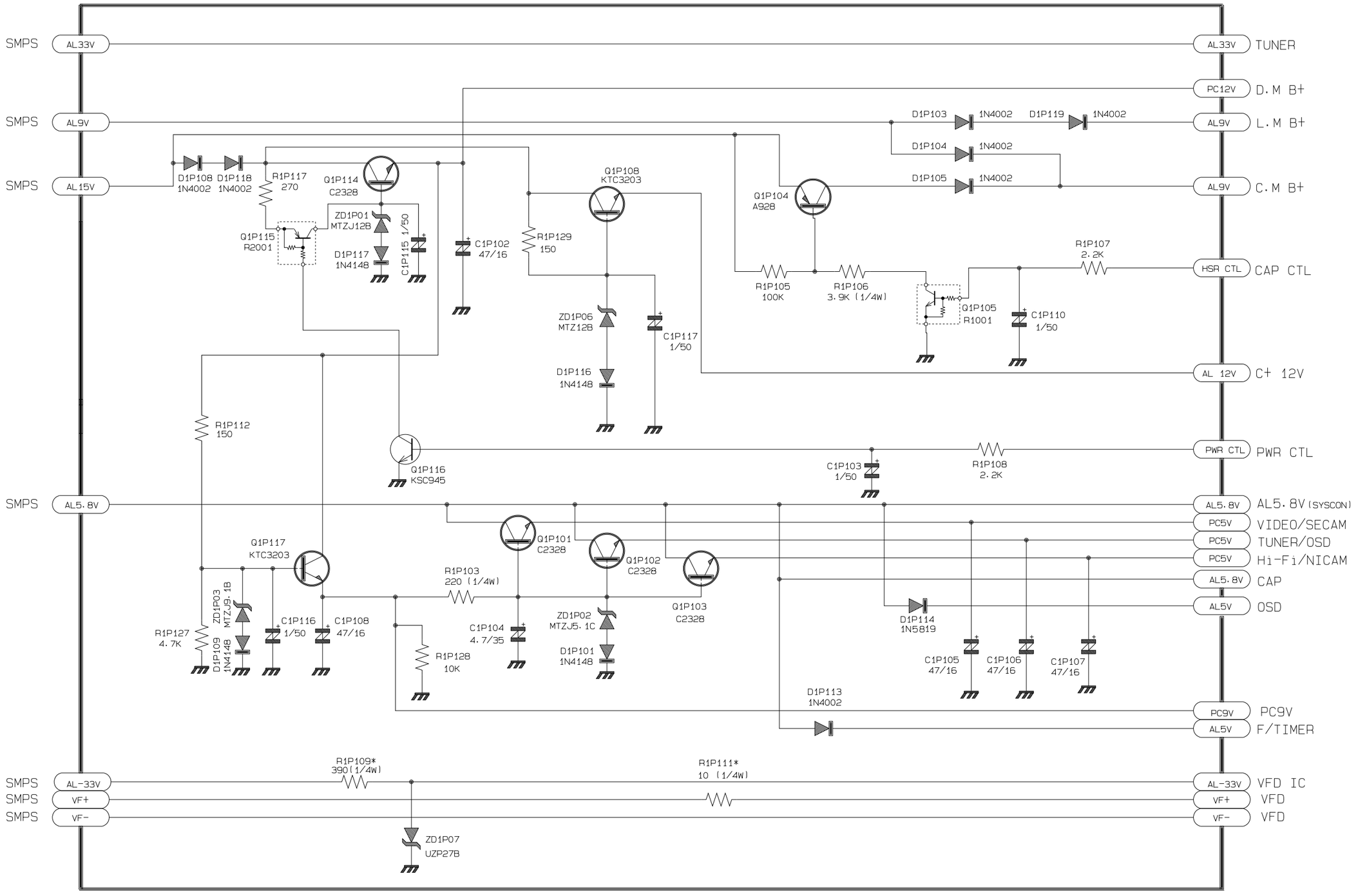


Conductor Side

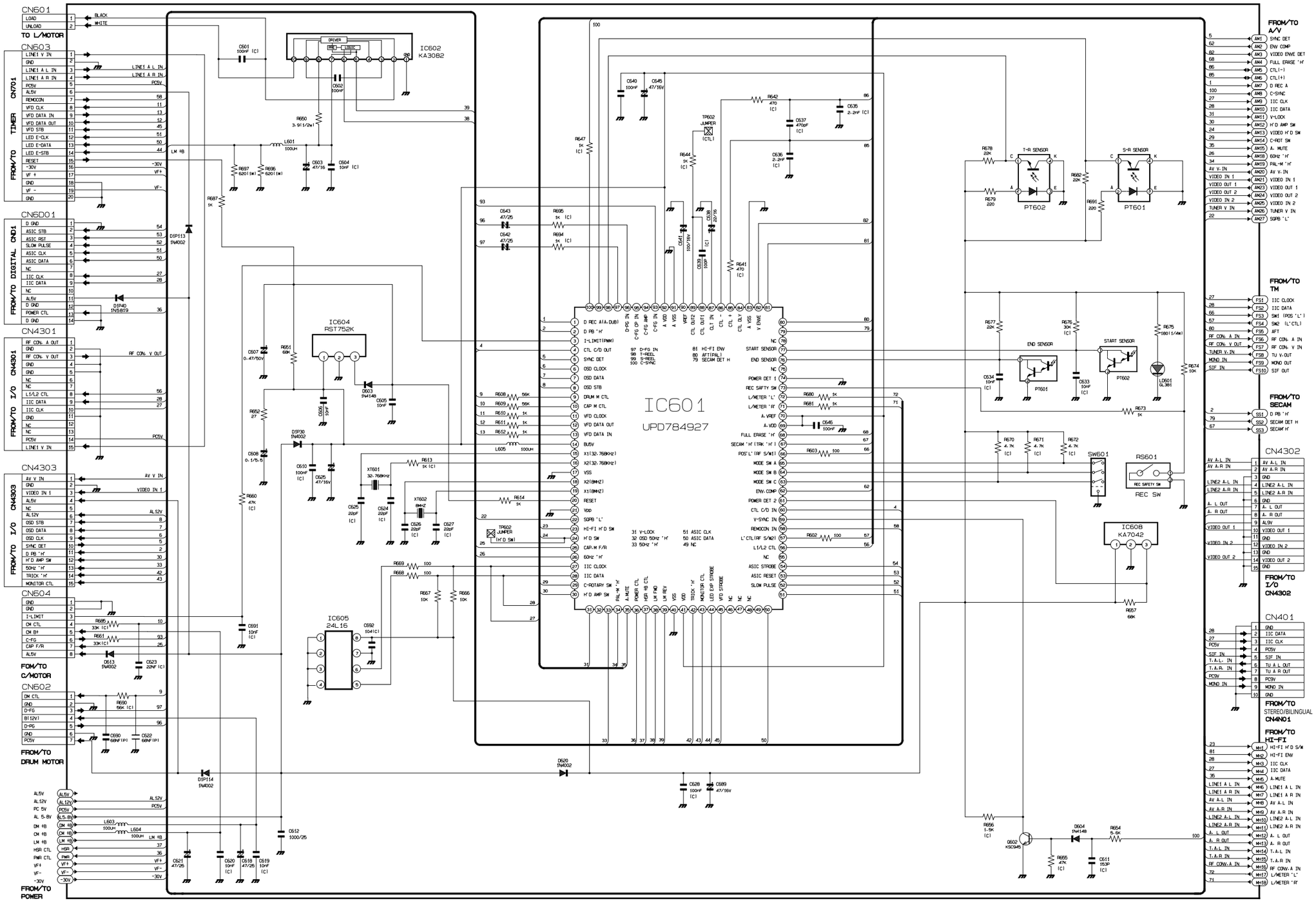
12-1 S.M.P.S.


HOT
NOTE : WHEN YOU CHECK THE VOLTAGE OF THE PARTS IN HOT CIRCUIT, CONNECT PRIMARY GND TO THE GND TERMINAL.
IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.
PT01 AC26-00001H
R10 2.7
D03 1T5
D01 1T5
D02 1T5
D04 1T5
C10 100/400V
R15 1M(1/2W)
R18 33K(3W)
R21 33K(3W)
C11 103(630V)
C14 221(1KV)
R12 18K(1/2W)
R13 18K(1/2W)
D11 UF4007
R11 18K(1/2W)
D05 1T5
C02 100nF
R14 33K(1/4W)
IC01 STR F6552
L02 25mH
VA01 SVC471D
C01 100nF
C07 100pF (AD TYPE)
C05 100pF (AD TYPE)
L01 400uH
C13 221
D12 F1T4
L11 BEAD
R17 22
D10 F1T4
R16 3.3K
F01 T1.6H
CN01 YW396-02V
R19 1K
R20 0.33(2W)
C12 33/50V
C03 3.3nF
C04 3.3nF
PRIMARY GND
R01 2.7M(1/2W)
AMERICA OPTION
IC02 PC123F /PS2561
R31 470
R32 1K
R33 1K
C39 0.1
R34 3K/F
R35 2.2K/F
IC03 431 PRECISION REFERENCE
D30 F1T4
D31 F1T4
L30 70UH
C30 10/100V
C31 100/25V 105°C
L31 70UH
D32 UG20D
L32 10uH
C32 330/25V 105C
C33 330/25V 85C
D33 FMB-G14L B10A45VI
L33 10uH
C34 1000/10V 105C
C35 470/10V
D34 F1T4
C36 47/50V
R30 1
D35 F1T4
C38 10nF
C37 470/10V
AL33V POWER DRIVE
AL9V POWER DRIVE
AL15V POWER DRIVE
AL5.8V POWER DRIVE
AL-33V POWER DRIVE
VF+ POWER DRIVE
VF- POWER DRIVE

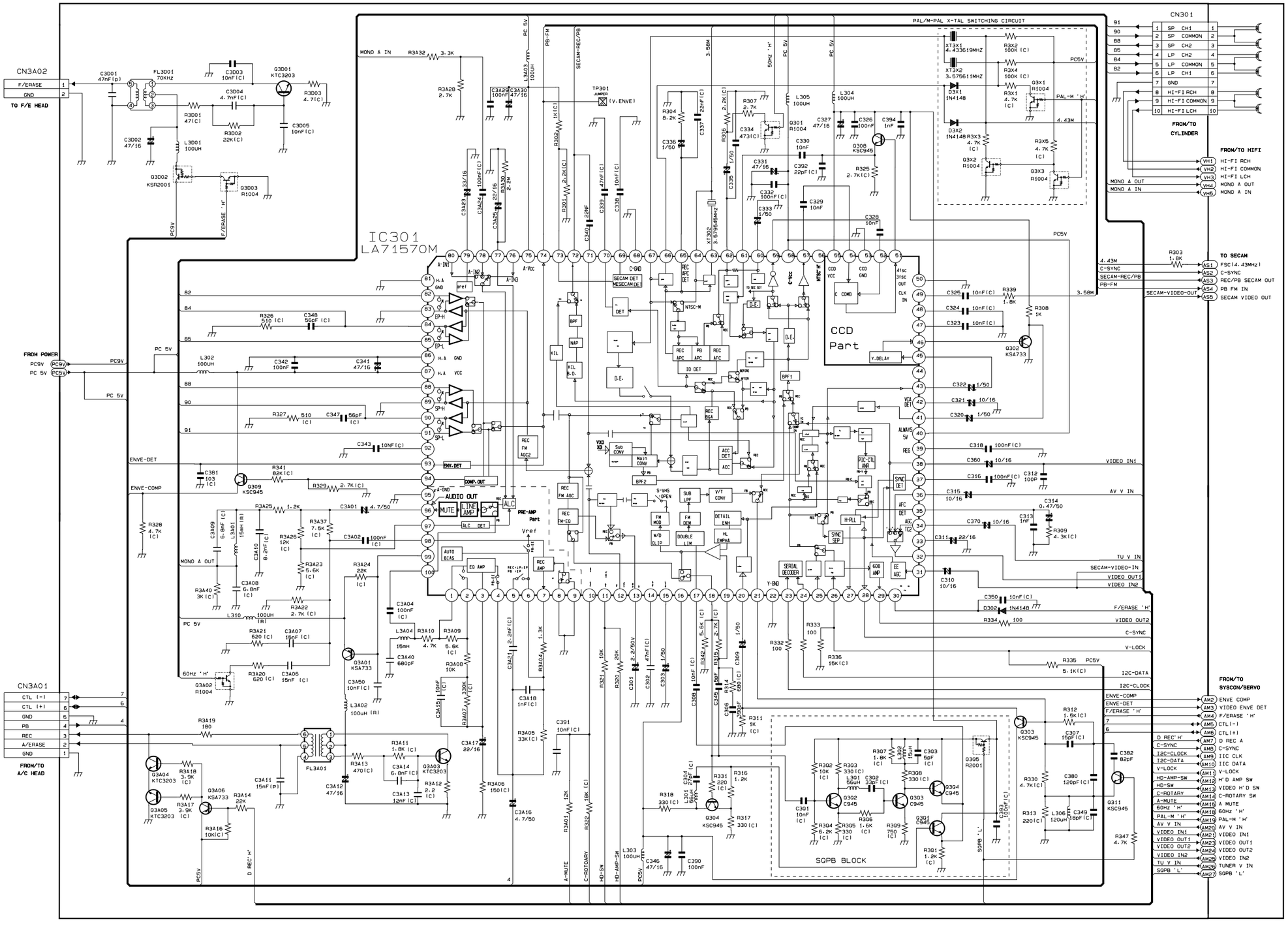
12-2 Power


SMPS
AL33V
AL33V
TUNER
PC12V
D.M B+
SMPS
AL9V
AL9V
L.M B+
SMPS
AL15V
AL9V
C.M B+
HSR CTL
CAP CTL
AL 12V
C+ 12V
PWR CTL
PWR CTL
SMPS
AL5.8V
AL5.8V
AL5.8V (SYSCON)
PC5V
VIDEO/SECAM
PC5V
TUNER/OSD
PC5V
Hi-Fi/NICAM
AL5.8V
CAP
AL5V
OSD
PC9V
PC9V
AL5V
F/TIMER
SMPS
AL-33V
AL-33V
VFD IC
SMPS
VF+
VF+
VFD
SMPS
VF-
VF-
VFD
D1P108 1N4002
D1P118 1N4002
R1P117 270
Q1P114 C2328
ZD1P01 MTZJ12B
D1P117 1N4148
C1P115 1/50
Q1P115 R2001
C1P102 47/16
R1P129 150
Q1P108 KTC3203
ZD1P06 MTZ12B
C1P117 1/50
D1P116 1N4148
R1P112 150
Q1P116 KSC945
D1P103 1N4002
D1P119 1N4002
D1P104 1N4002
D1P105 1N4002
Q1P104 A928
R1P105 100K
R1P106 3.9K (1/4W)
Q1P105 R1001
C1P110 1/50
R1P107 2.2K
C1P103 1/50
R1P108 2.2K
Q1P117 KTC3203
R1P103 220 (1/4W)
Q1P101 C2328
Q1P102 C2328
Q1P103 C2328
ZD1P03 MTZJ9.1B
D1P109 1N4148
R1P127 4.7K
C1P116 1/50
C1P108 47/16
R1P128 10K
C1P104 4.7/35
ZD1P02 MTZJ5.1C
D1P101 1N4148
D1P114 1N5819
C1P105 47/16
C1P106 47/16
C1P107 47/16
D1P113 1N4002
R1P109* 390 (1/4W)
R1P111* 10 (1/4W)
ZD1P07 UZP27B

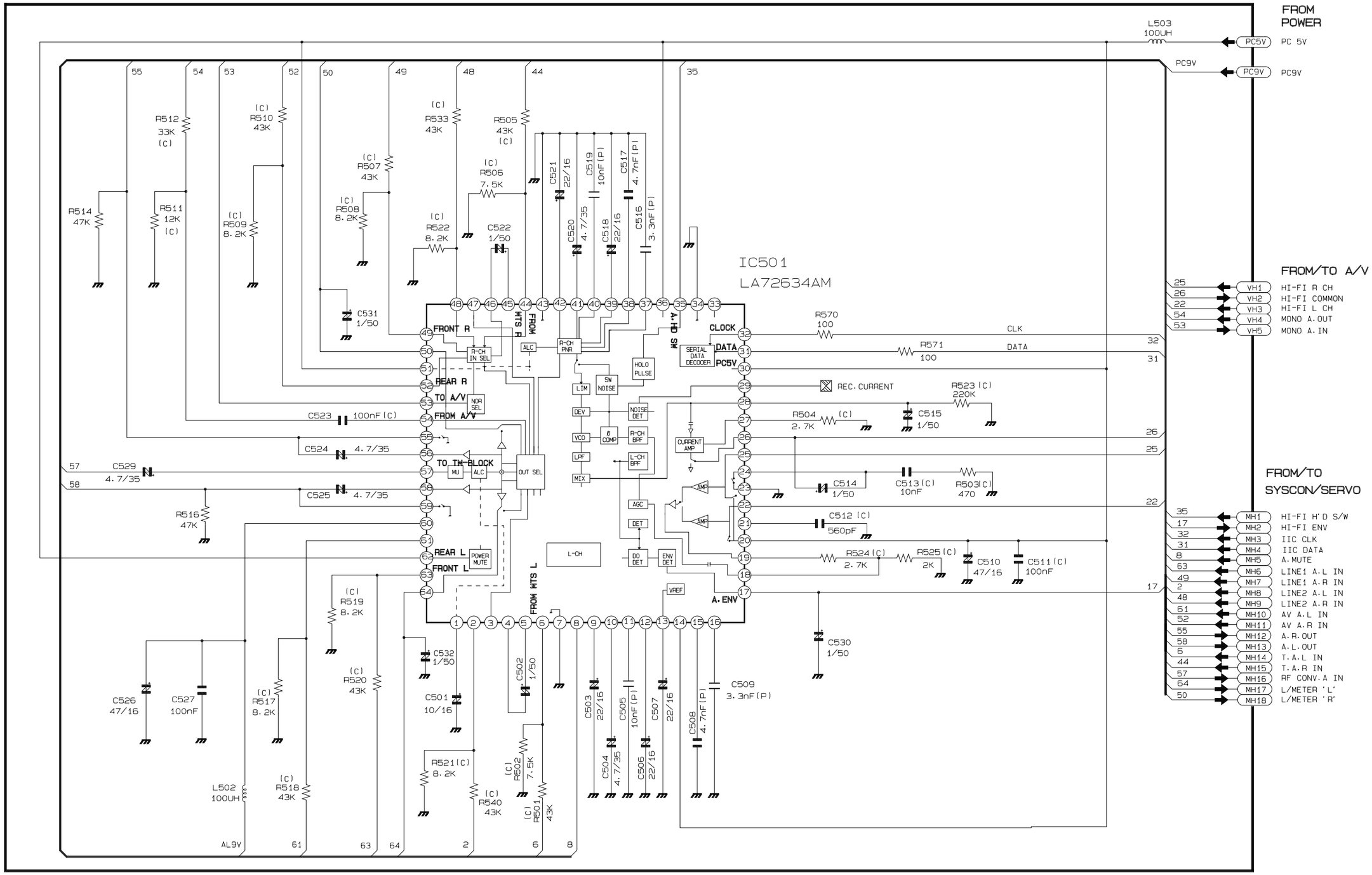
12-3 System Control/Servo



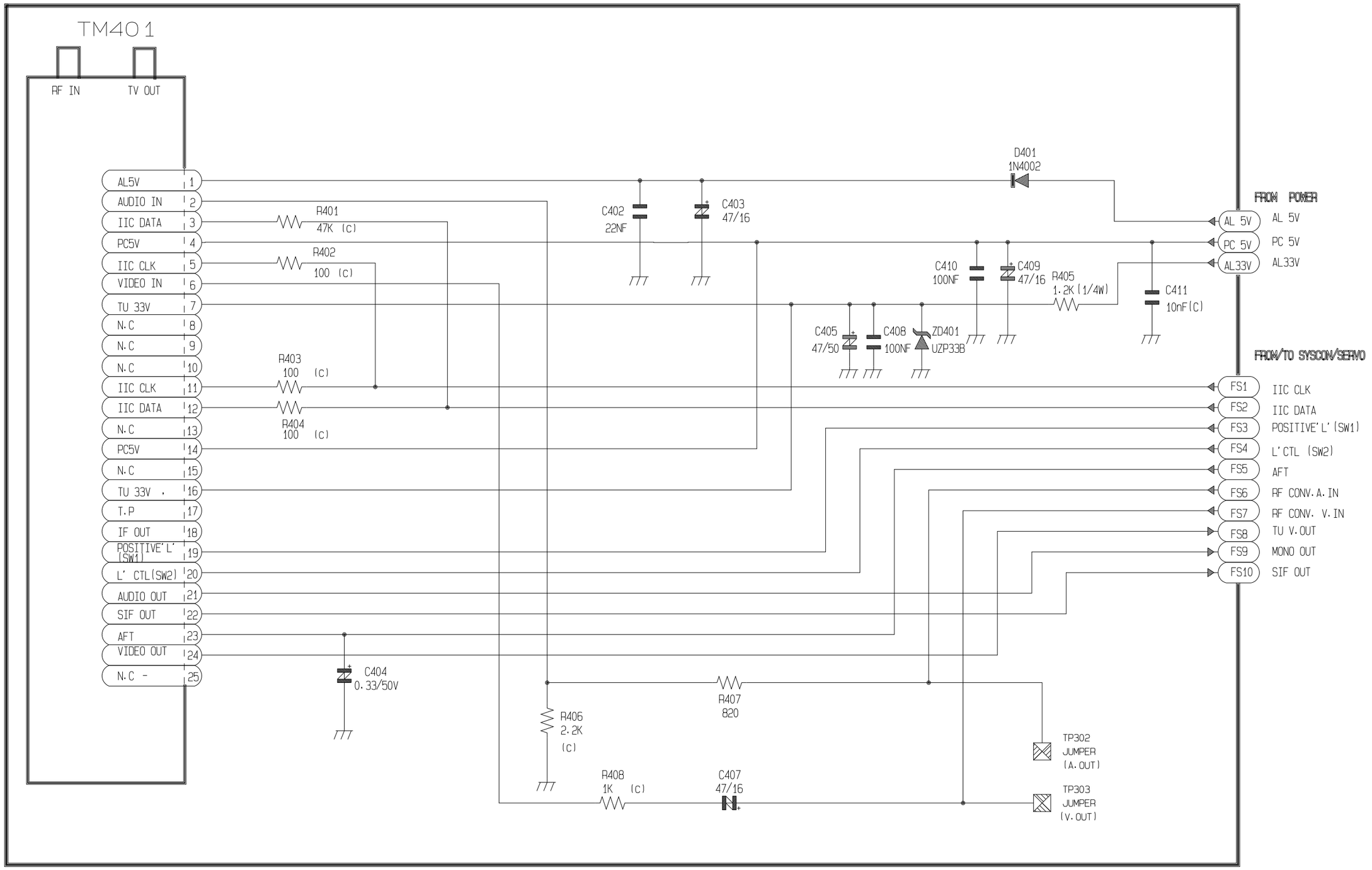
12-4 Audio/Video



12-5 Hi-Fi


FROM POWER
L503 100UH
PC5V
PC 5V
PC9V
PC9V
IC501
LA72634AM
FROM/TO A/V
VH1 HI-FI R CH
VH2 HI-FI COMMON
VH3 HI-FI L CH
VH4 MONO A.OUT
VH5 MONO A.IN
FROM/TO SYSCON/SERVO
MH1 HI-FI H'D S/W
MH2 HI-FI ENV
MH3 IIC CLK
MH4 IIC DATA
MH5 A.MUTE
MH6 LINE1 A.L IN
MH7 LINE1 A.R IN
MH8 LINE2 A.L IN
MH9 LINE2 A.R IN
MH10 AV A.L IN
MH11 AV A.R IN
MH12 A.R.OUT
MH13 A.L.OUT
MH14 T.A.L IN
MH15 T.A.R IN
MH16 RF CONV.A IN
MH17 L/METER 'L'
MH18 L/METER 'R'
FRONT R
REAR R
TO A/V
FROM A/V
REAR L
FRONT L
TO TM BLOCK
FROM MTS L
CLOCK
DATA
PC5V
A.ENV
REC.CURRENT
R-CH
L-CH
ALC
OUT SEL
POWER MUTE
SERIAL DATA DECODER
CURRENT AMP
VCO
LPF
MIX
AGC
DET
VREF
R570 100
R571 100
R504 2.7K (C)
R523 (C) 220K
R524 (C) 2.7K
R525 (C) 2K
R503 (C) 470
R512 33K (C)
R514 47K
R511 12K (C)
R516 47K
R517 8.2K (C)
R518 43K (C)
R519 8.2K (C)
R520 43K (C)
R521 (C) 8.2K
R522 8.2K (C)
R533 43K (C)
R505 43K (C)
R506 7.5K (C)
R507 43K (C)
R508 8.2K (C)
R509 8.2K (C)
R510 43K (C)
R540 43K (C)
R501 43K (C)
R502 7.5K (C)
C521 22/16
C519 10nF(P)
C517 4.7nF(P)
C520 4.7/35
C518 22/16
C516 3.3nF(P)
C522 1/50
C531 1/50
C523 100nF(C)
C524 4.7/35
C529 4.7/35
C525 4.7/35
C532 1/50
C502 1/50
C501 10/16
C503 22/16
C505 10nF(P)
C507 22/16
C504 4.7/35
C506 22/16
C508 4.7nF(P)
C509 3.3nF(P)
C530 1/50
C515 1/50
C514 1/50
C513 (C) 10nF
C512 (C) 560pF
C510 47/16
C511 (C) 100nF
C526 47/16
C527 100nF
L502 100UH
AL9V

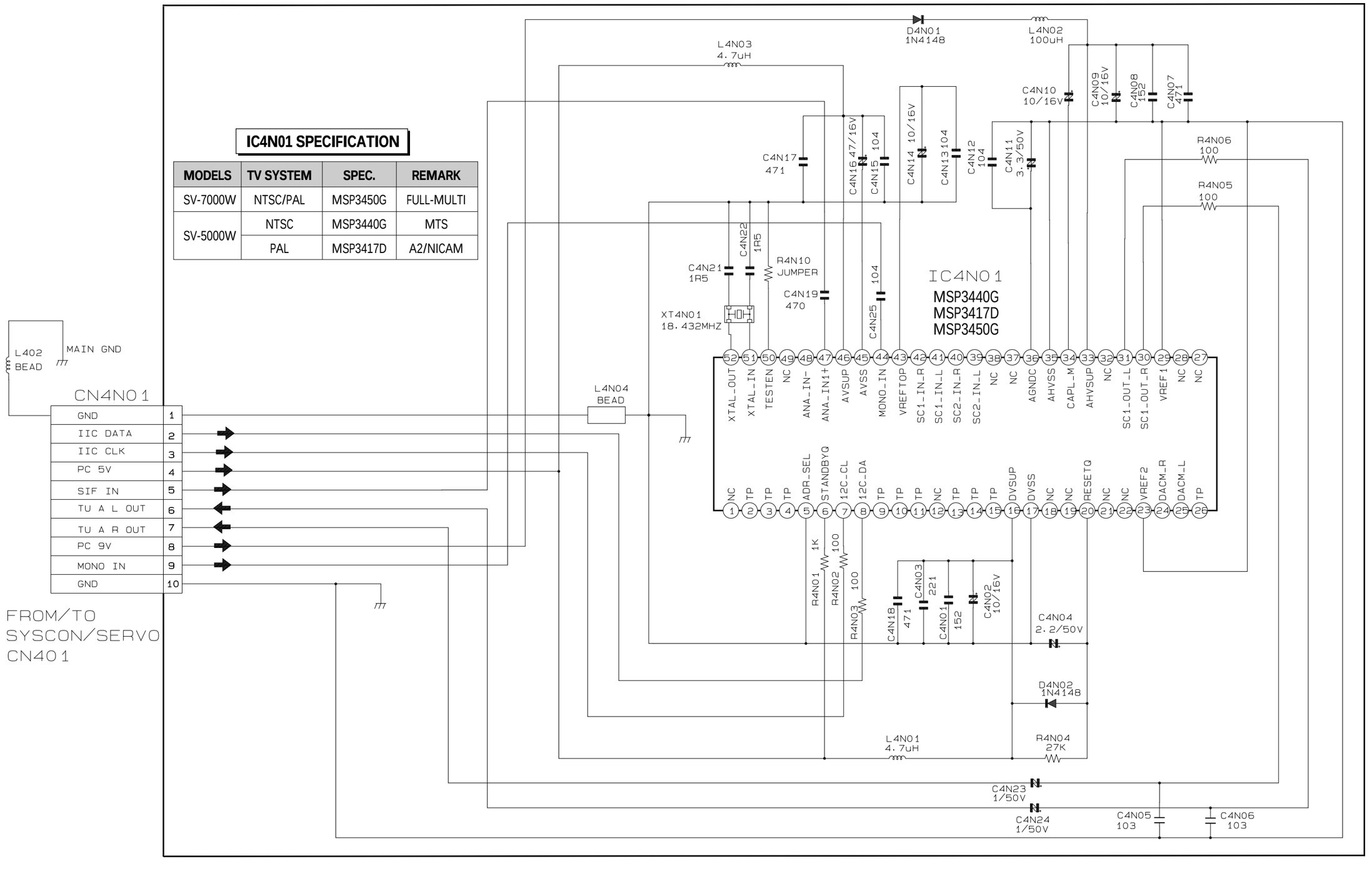
12-6 TM-Block


TM401
RF IN
TV OUT
AL5V 1
AUDIO IN 2
IIC DATA 3
PC5V 4
IIC CLK 5
VIDEO IN 6
TU 33V 7
N.C 8
N.C 9
N.C 10
IIC CLK 11
IIC DATA 12
N.C 13
PC5V 14
N.C 15
TU 33V 16
T.P 17
IF OUT 18
POSITIVE'L' (SW1) 19
L' CTL(SW2) 20
AUDIO OUT 21
SIF OUT 22
AFT 23
VIDEO OUT 24
N.C 25
R401 47K (C)
R402 100 (C)
R403 100 (C)
R404 100 (C)
C402 22NF
C403 47/16
D401 1N4002
C410 100NF
C409 47/16
R405 1.2K (1/4W)
C411 10nF(C)
C405 47/50
C408 100NF
ZD401 UZP33B
C404 0.33/50V
R406 2.2K (C)
R407 820
R408 1K (C)
C407 47/16
TP302 JUMPER (A.OUT)
TP303 JUMPER (V.OUT)
FROM POWER
AL 5V
PC 5V
AL33V
FROM/TO SYSCON/SERVO
FS1 IIC CLK
FS2 IIC DATA
FS3 POSITIVE'L' (SW1)
FS4 L' CTL (SW2)
FS5 AFT
FS6 RF CONV. A. IN
FS7 RF CONV. V. IN
FS8 TU V. OUT
FS9 MONO OUT
FS10 SIF OUT

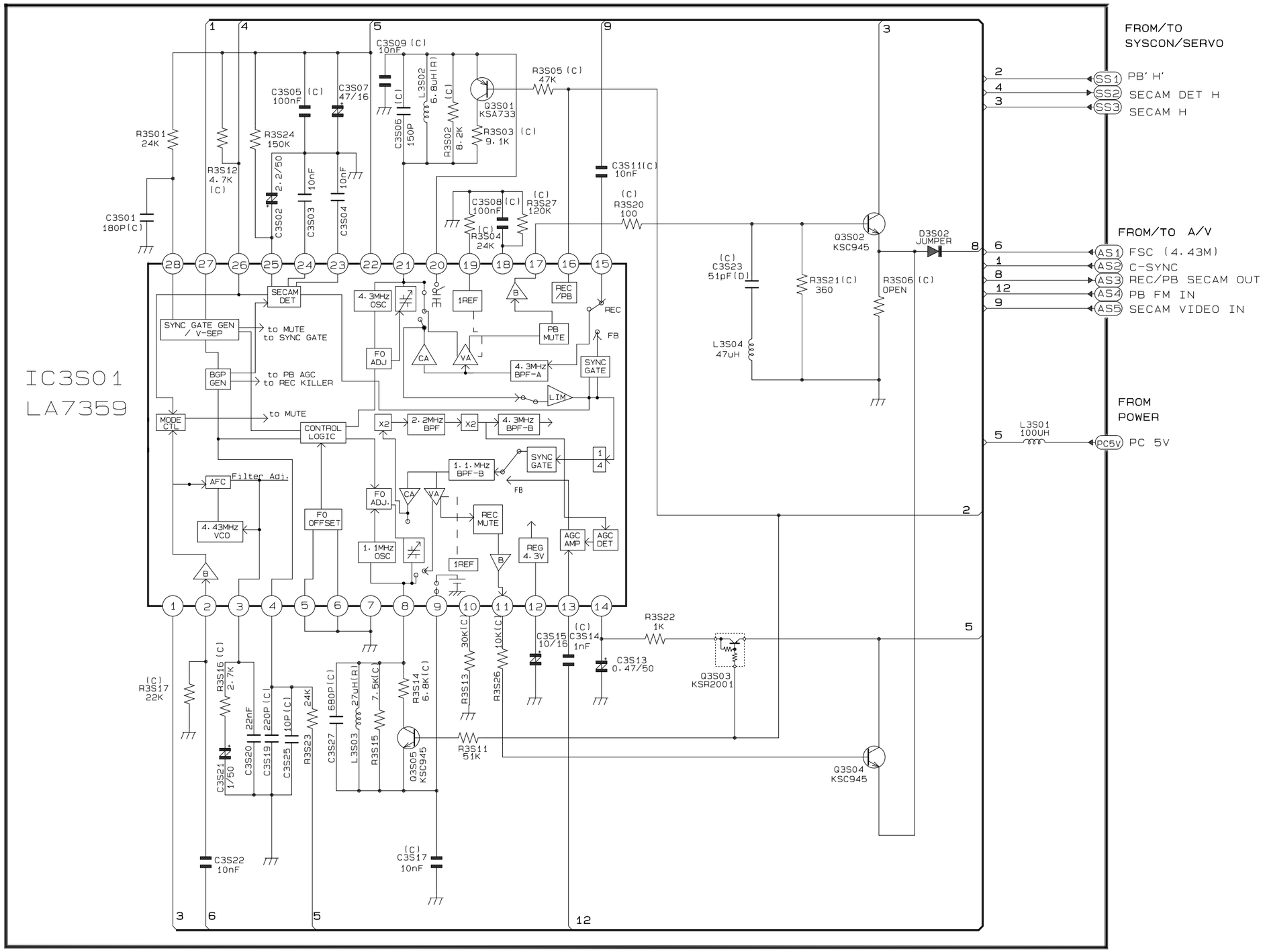
12-7 Stereo/Bilingual (A2/NICAM)

IC4N01 SPECIFICATION

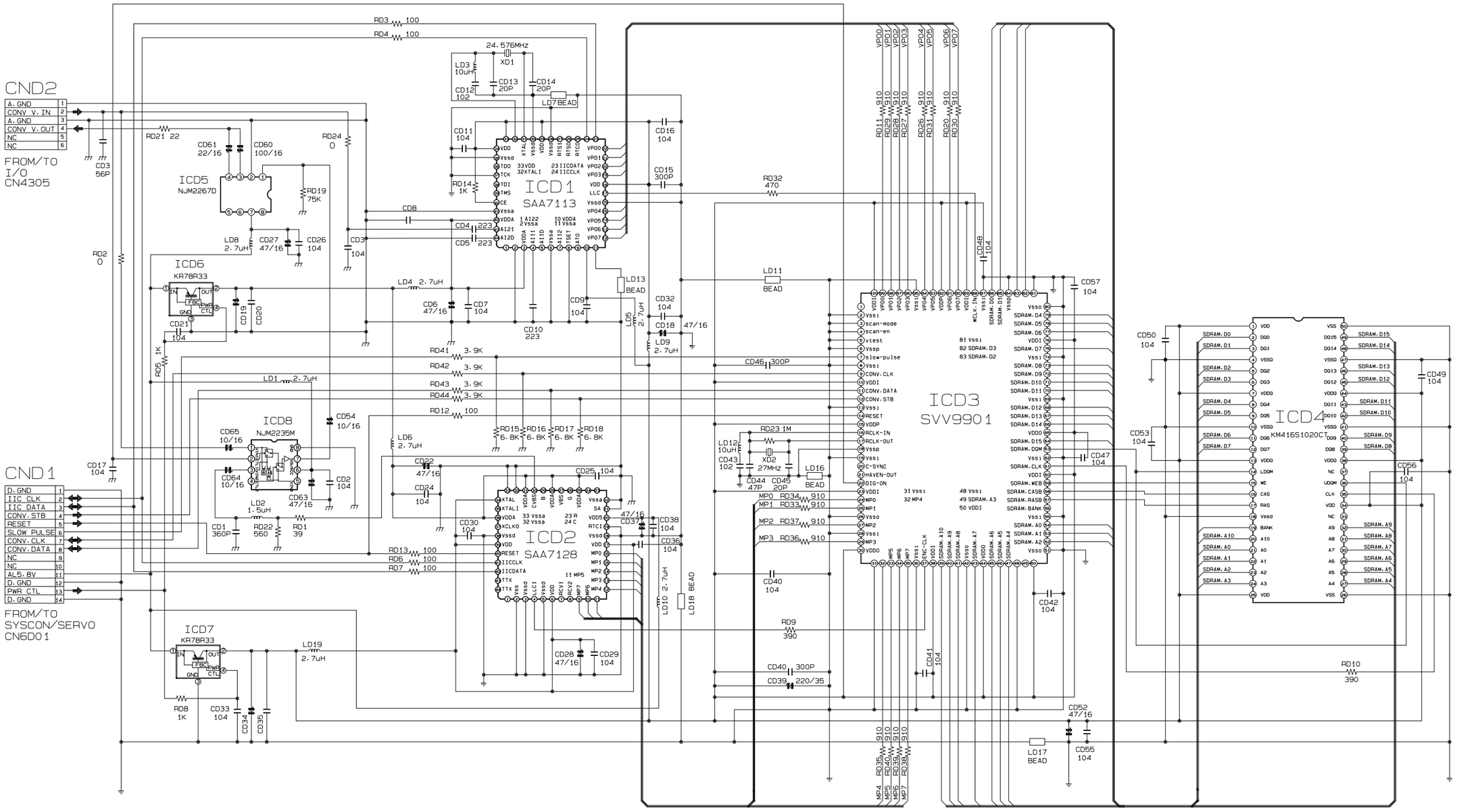
MODELS	TV SYSTEM	SPEC.	REMARK
SV-7000W	NTSC/PAL	MSP3450G	FULL-MULTI
SV-5000W	NTSC	MSP3440G	MTS
	PAL	MSP3417D	A2/NICAM



12-8 SECAM


IC3S01
LA7359
FROM/TO
SYSCON/SERVO
PB' H'
SECAM DET H
SECAM H
FROM/TO A/V
FSC (4.43M)
C-SYNC
REC/PB SECAM OUT
PB FM IN
SECAM VIDEO IN
FROM
POWER
PC 5V
L3S01
100UH
C3S09 (C)
10nF
R3S05 (C)
47K
Q3S01
KSA733
C3S05 (C)
100nF
C3S07
47/16
L3S02
6.8UH(R)
C3S06
150P
R3S02
8.2K
R3S03 (C)
9.1K
R3S01
24K
R3S24
150K
R3S12
4.7K
(C)
C3S01
180P(C)
C3S02
2.2/50
C3S03
10nF
C3S04
10nF
C3S11(C)
10nF
C3S08(C)
100nF
R3S27
120K
(C)
R3S04
24K
(C)
R3S20
100
Q3S02
KSC945
D3S02
JUMPER
(C)
C3S23
51pF(D)
R3S21(C)
360
R3S06 (C)
OPEN
L3S04
47uH
SECAM DET
SYNC GATE GEN / V-SEP
to MUTE
to SYNC GATE
BGP GEN
to PB AGC
to REC KILLER
MODE CTL
to MUTE
CONTROL LOGIC
AFC
Filter Adj.
4.43MHz VCO
FO OFFSET
4.3MHz OSC
1REF
B
REC /PB
REC
PB MUTE
FB
FO ADJ
CA
VA
4.3MHz BPF-A
SYNC GATE
LIM
X2
2.2MHz BPF
X2
4.3MHz BPF-B
1.1.MHz BPF-B
SYNC GATE
1/4
FB
FO ADJ.
CA
VA
REC MUTE
1.1MHz OSC
1REF
B
REG 4.3V
AGC AMP
AGC DET
(C)
R3S17
22K
R3S16 (C)
2.7K
C3S21
1/50
C3S20
22nF
C3S19
220P(C)
C3S25
10P(C)
R3S23
24K
C3S27
680P(C)
L3S03
27uH(R)
R3S15
7.5K(C)
R3S14
6.8K(C)
Q3S05
KSC945
R3S13
30K(C)
R3S26
10K(C)
R3S11
51K
C3S15
10/16
(C)
C3S14
1nF
C3S13
0.47/50
R3S22
1K
Q3S03
KSR2001
Q3S04
KSC945
C3S22
10nF
(C)
C3S17
10nF

12-9 Digital


CND2
A.GND 1
CONV V.IN 2
A.GND 3
CONV V.OUT 4
NC 5
NC 6
FROM/TO I/O CN4305
CND1
D.GND 1
IIC CLK 2
IIC DATA 3
CONV.STB 4
RESET 5
SLOW PULSE 6
CONV.CLK 7
CONV.DATA 8
NC 9
NC 10
AL5.8V 11
D.GND 12
PWR CTL 13
D.GND 14
FROM/TO SYSCON/SERVO CN6D01
ICD1 SAA7113
ICD2 SAA7128
ICD3 SVV9901
ICD4 KM416S1020CT
ICD5 NJM2267D
ICD6 KA78R33
ICD7 KA78R33
ICD8 NJM2235M
24.576MHz
XD1
XD2 27MHz
RD3 100
RD4 100
RD12 100
RD13 100
RD6 100
RD7 100
RD32 470
RD9 390
RD10 390
RD23 1M
LD1 2.7uH
LD3 10uH
LD4 2.7uH
LD5 2.7uH
LD6 2.7uH
LD7 BEAD
LD9 2.7uH
LD10 2.7uH
LD11 BEAD
LD12 10uH
LD13 BEAD
LD16 BEAD
LD17 BEAD
LD18 BEAD
LD19 2.7uH
LD2 1.5uH
CD46 300P
CD40 300P
CD39 220/35
CD40 104
CD41 104
CD42 104
CD43 102
CD44 47P
CD45 20P
CD47 104
CD48 104
CD49 104
CD50 104
CD52 47/16
CD53 104
CD55 104
CD56 104
CD57 104
SDRAM.D0
SDRAM.D1
SDRAM.D2
SDRAM.D3
SDRAM.D4
SDRAM.D5
SDRAM.D6
SDRAM.D7
SDRAM.D8
SDRAM.D9
SDRAM.D10
SDRAM.D11
SDRAM.D12
SDRAM.D13
SDRAM.D14
SDRAM.D15
SDRAM.DQM
SDRAM.CLK
SDRAM.WEB
SDRAM.CASB
SDRAM.RASB
SDRAM.BANK
SDRAM.A0
SDRAM.A1
SDRAM.A2
SDRAM.A3
SDRAM.A4
SDRAM.A5
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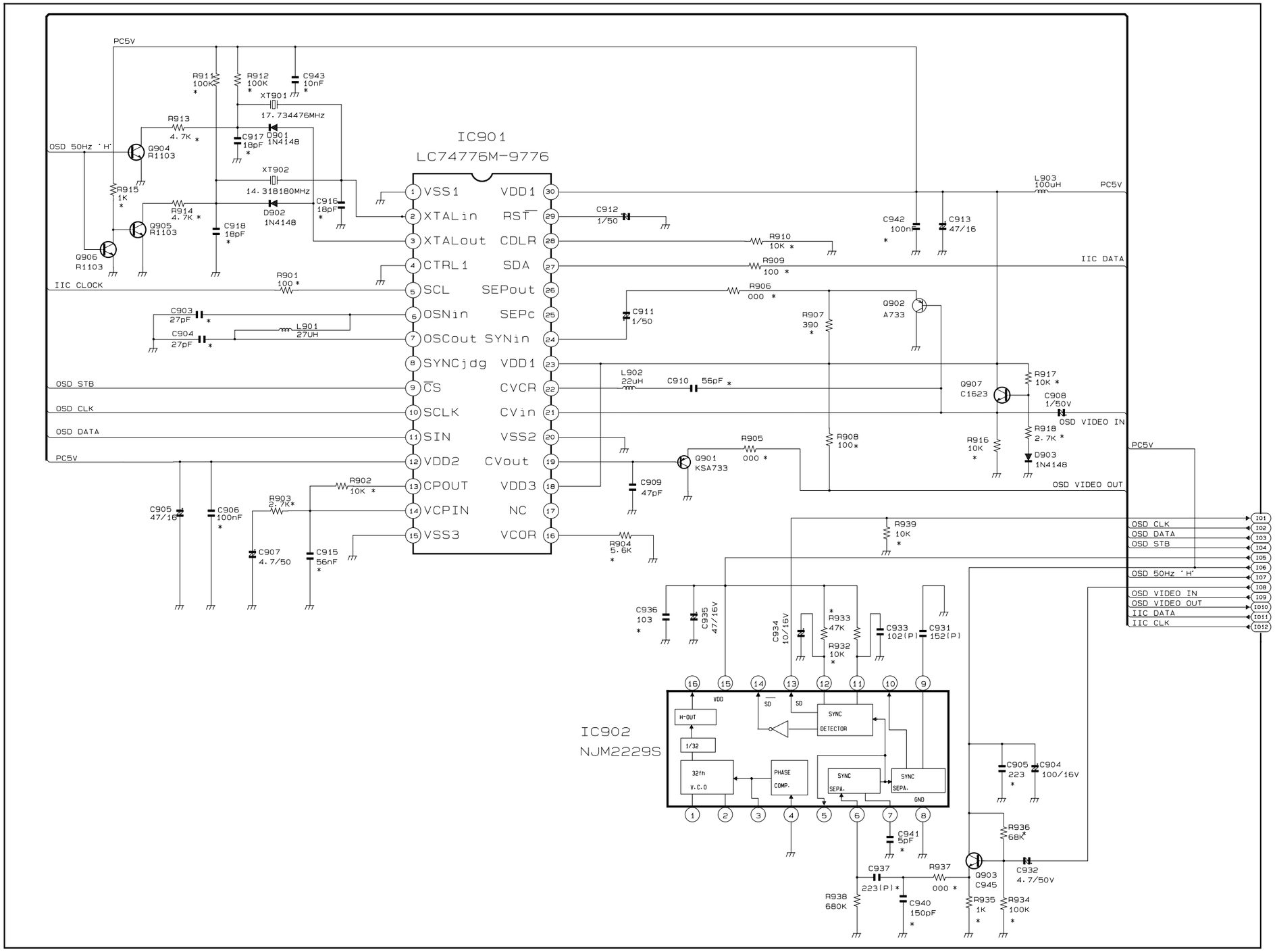
SDRAM.A8
SDRAM.A9
SDRAM.A10

12-10 OSD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IC902
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PHASE COMP.
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GND
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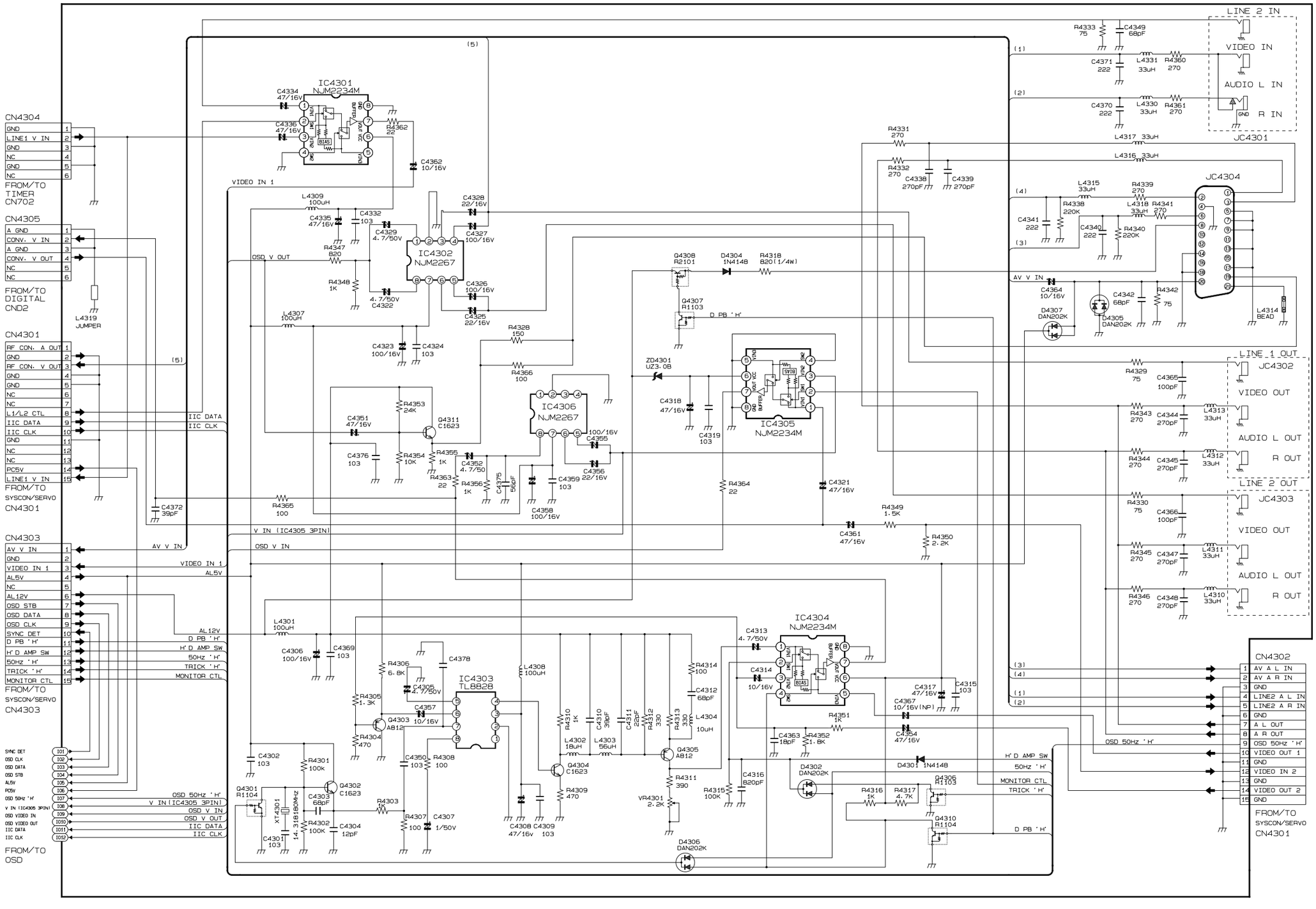
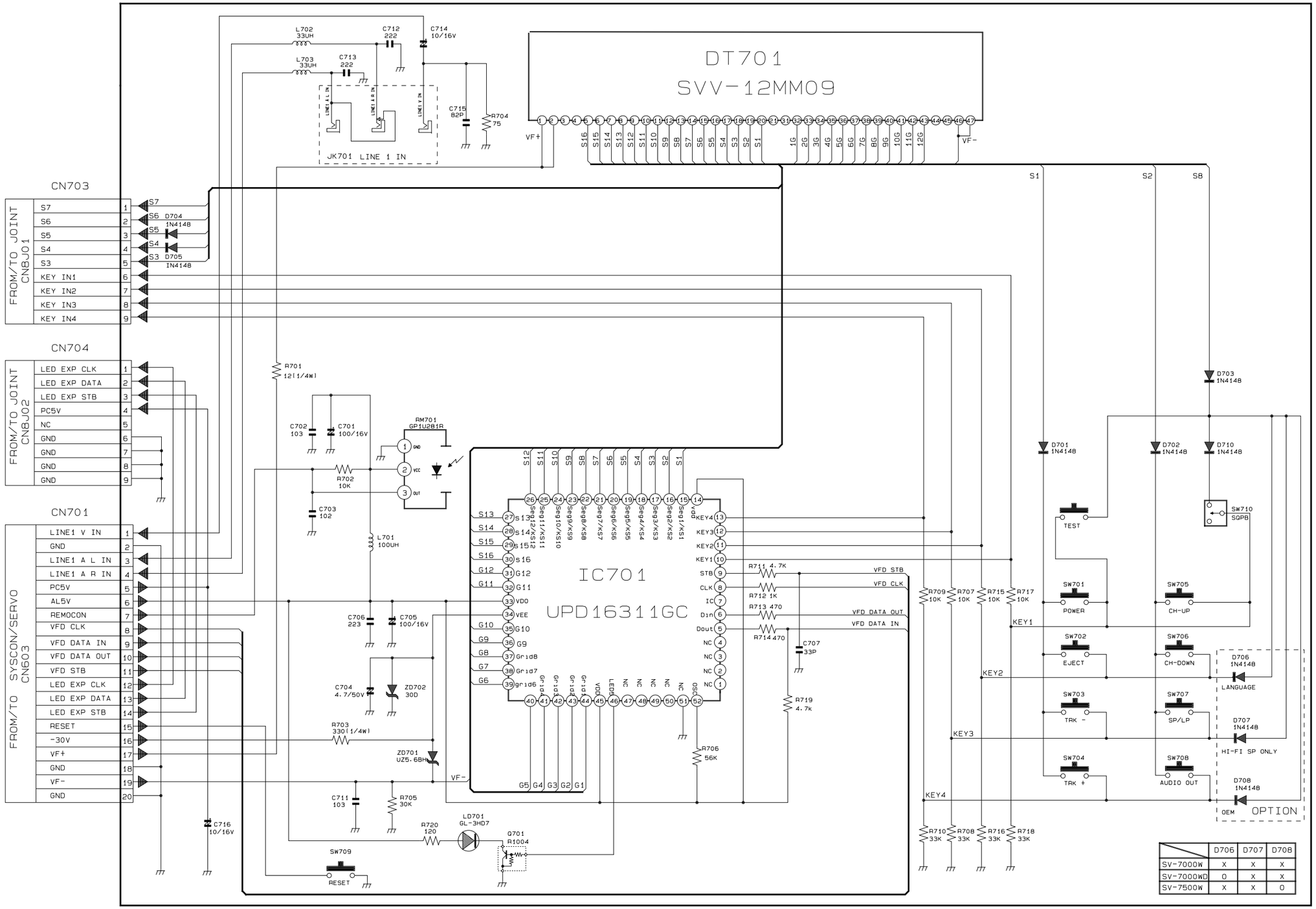
V IN(IC4305 3PIN)

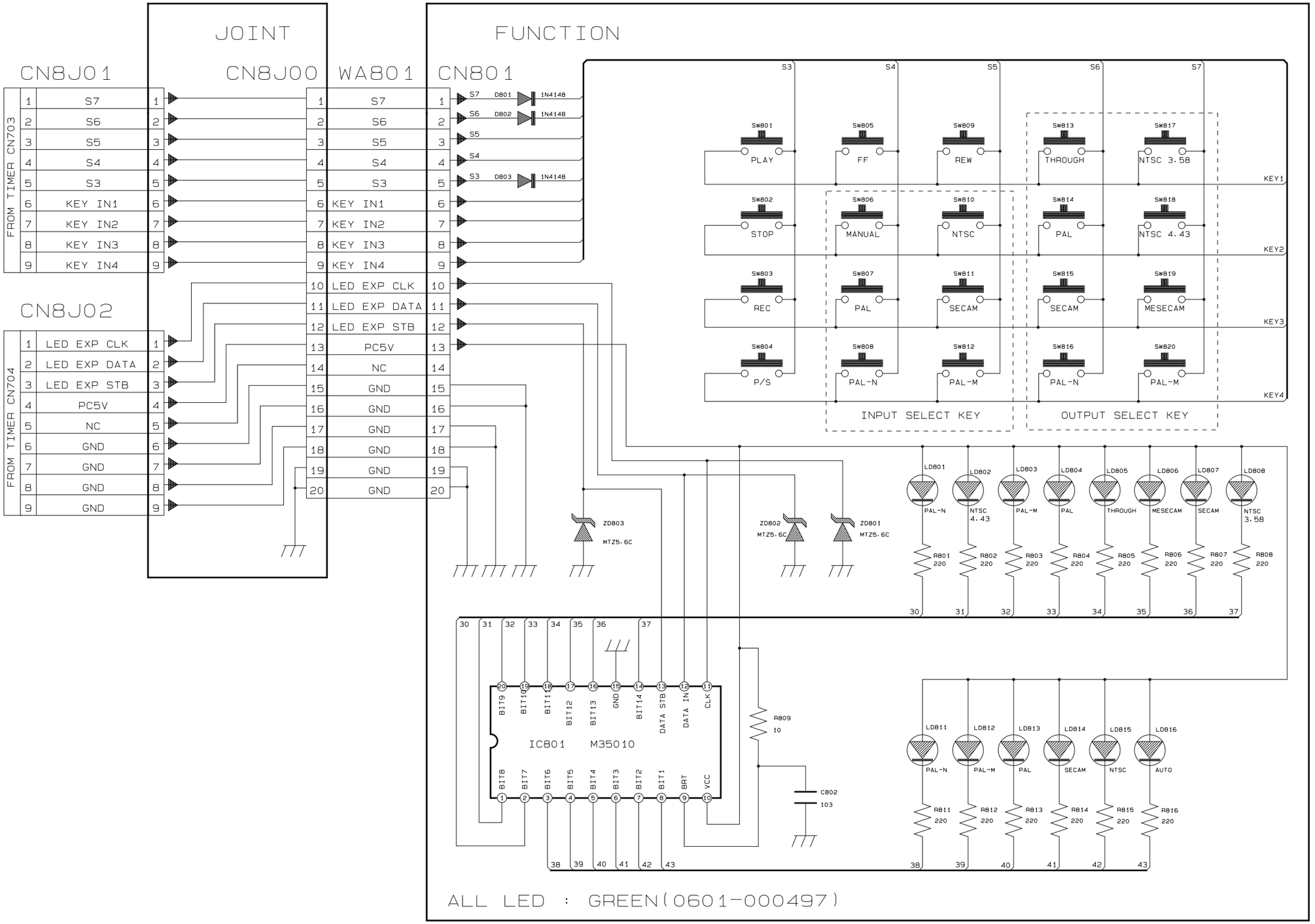
12-11 Input-Output



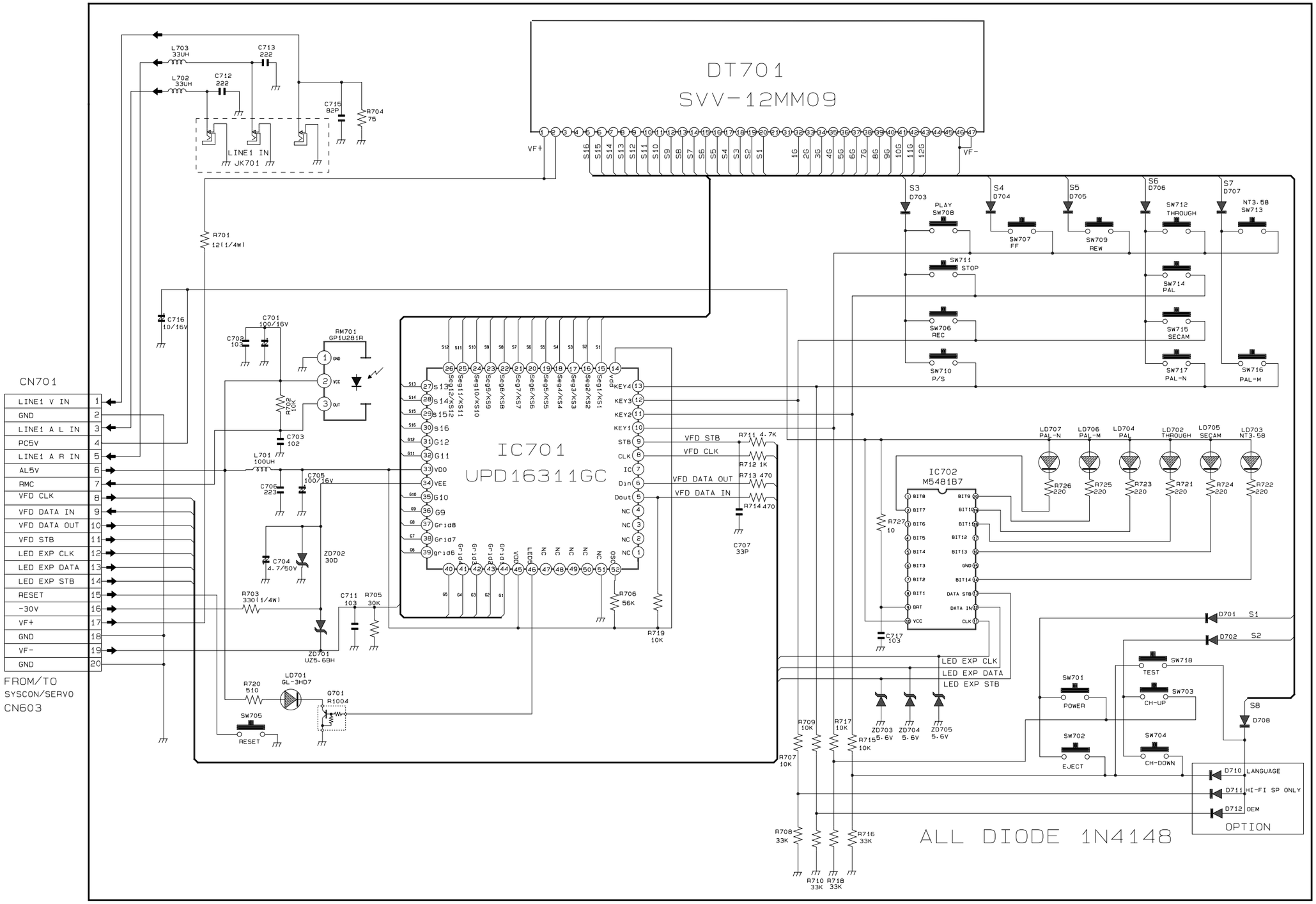
12-12 Timer (SV-7000W)



12-13 Function/Joint (SV-7000W)



12-14 Function-Timer (SV-5000W)



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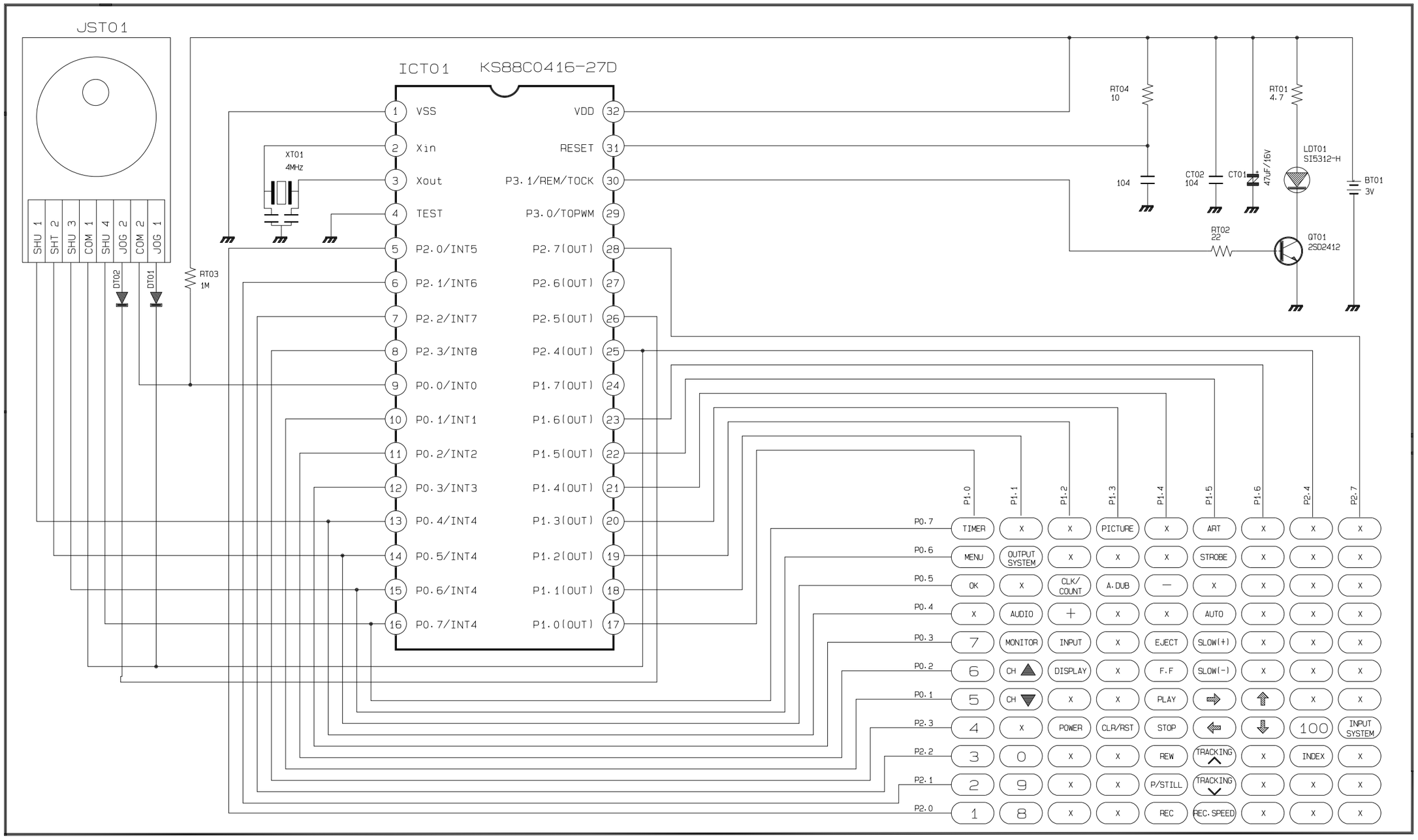

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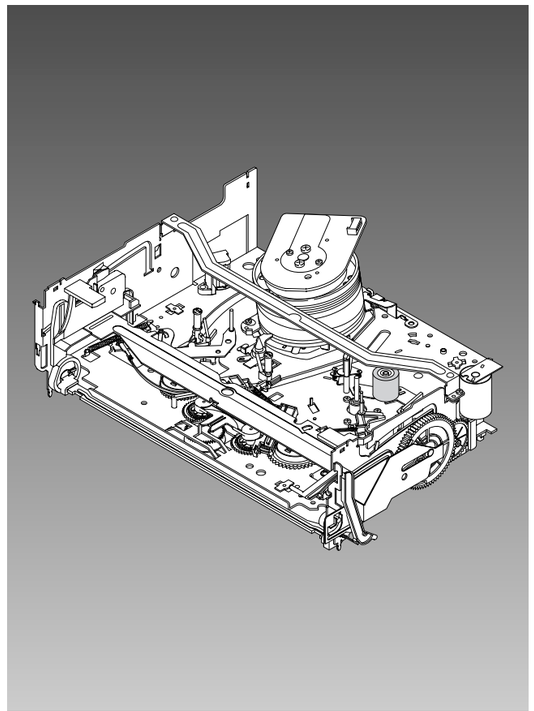
VHS DECK



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1. Disassembly and Reassembly

2. Alignment and Adjustment

1. Disassembly and Reassembly

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1-1-1 Top View

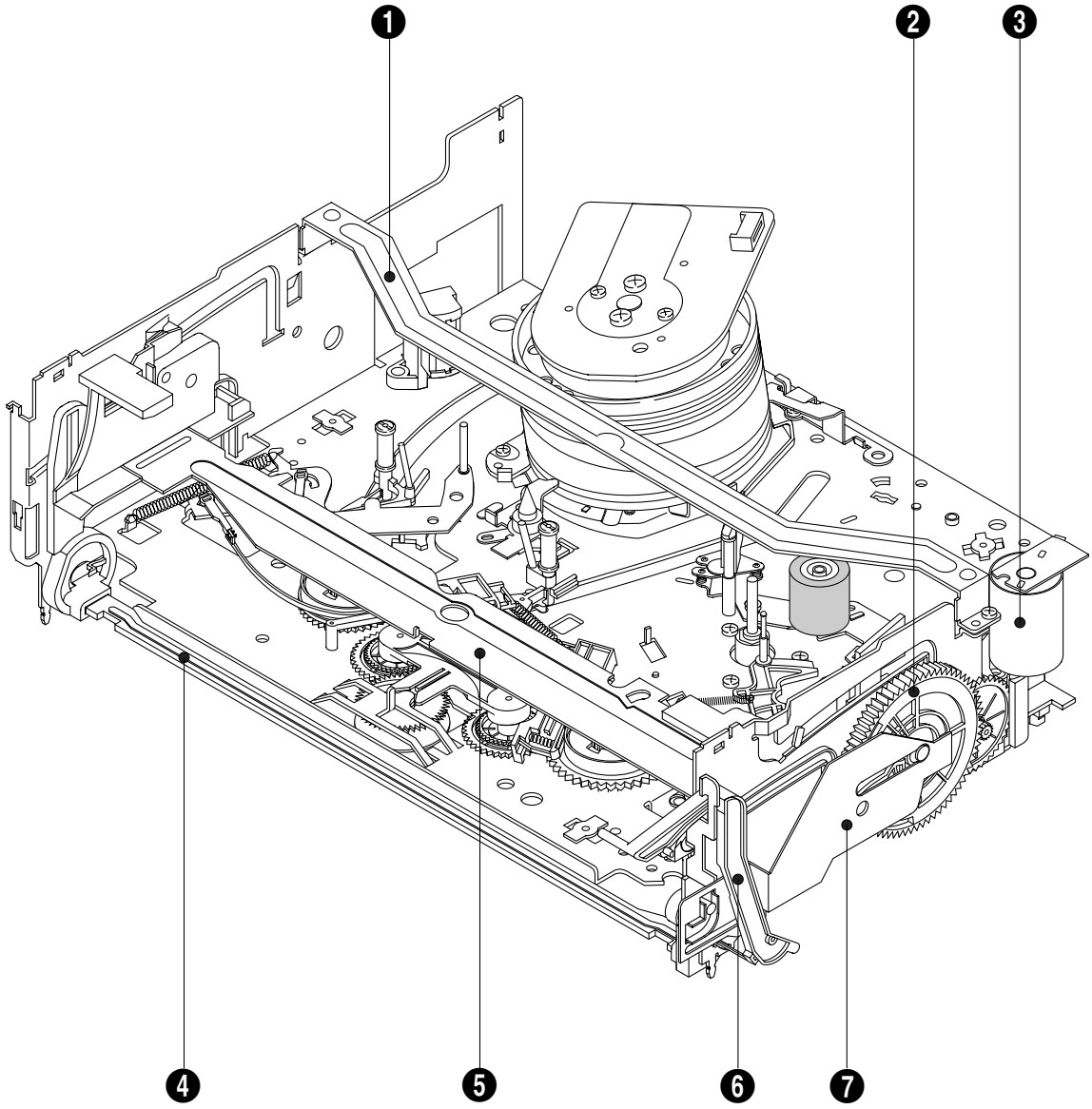


Fig. 1-1 Top parts Location-1

1. BRACKET FL TOP
2. GEAR FL CAM
3. MOTOR LOADING ASS'Y
4. LEVER FL ARM ASS'Y
5. HOLDER FL CASSETTE ASS'Y
6. LEVER FL DOOR
7. SLIDER FL DRIVE

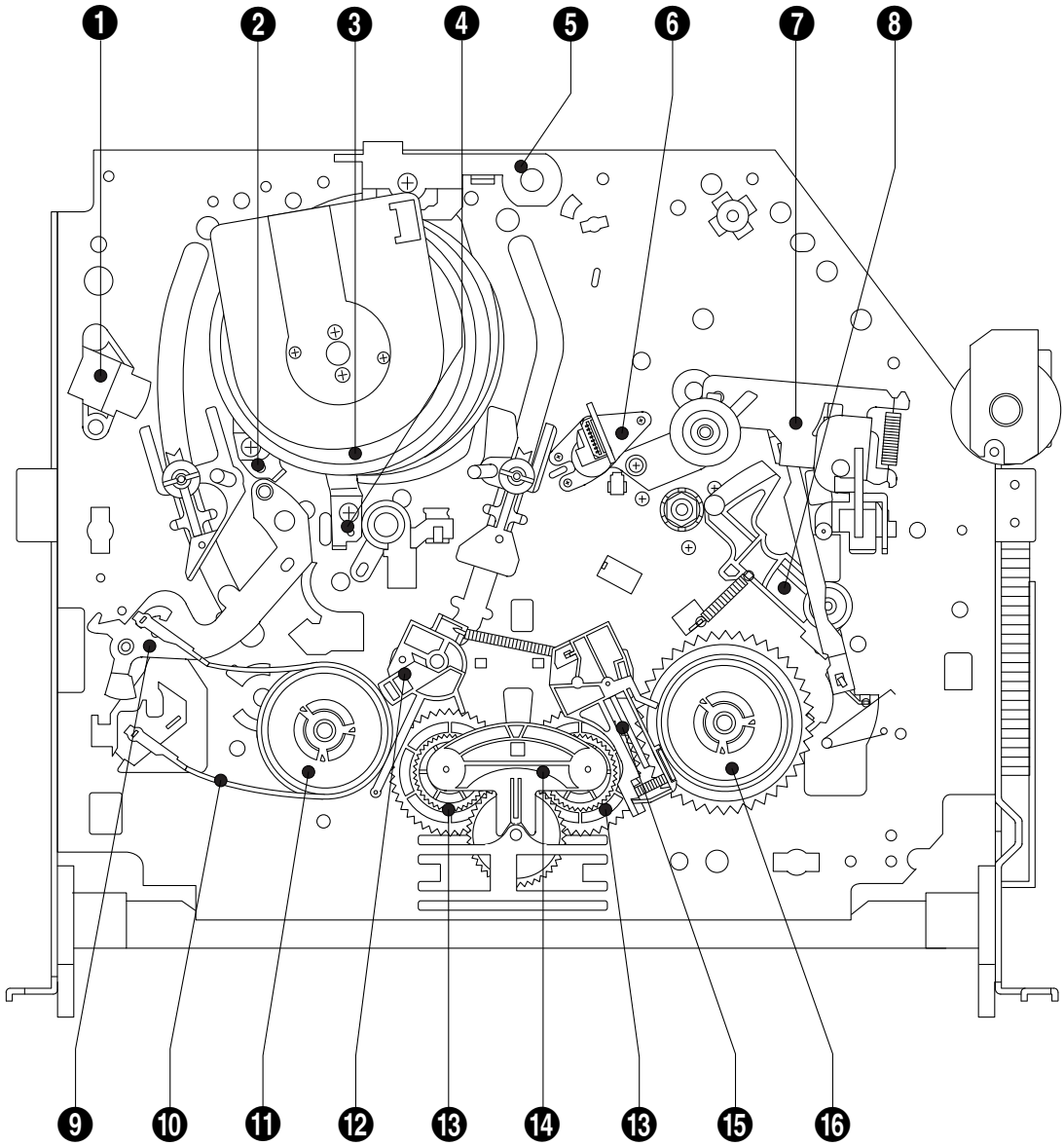


Fig. 1-2 Top Parts Location-2

❶ FE HEAD
❷ PLATE CYLINDER C
❸ CYLINDER ASS'Y
❹ PLATE CYLINDER B
❺ PLATE CYLINDER A
❻ ACE HEAD ASS'Y
❼ UNIT PINCH ASS'Y
❽ LEVER #9 GUIDE ASS'Y
❾ LEVER TENSION ASS'Y
❿ BAND BRAKE ASS'Y
⓫ DISK S REEL
⓬ LEVER S BRAKE ASS'Y
⓭ GEAR IDLE
⓮ LEVER IDLE
⓯ LEVER T BRAKE ASS'Y
⓰ DISK T REEL

1-1-2 Bottom View

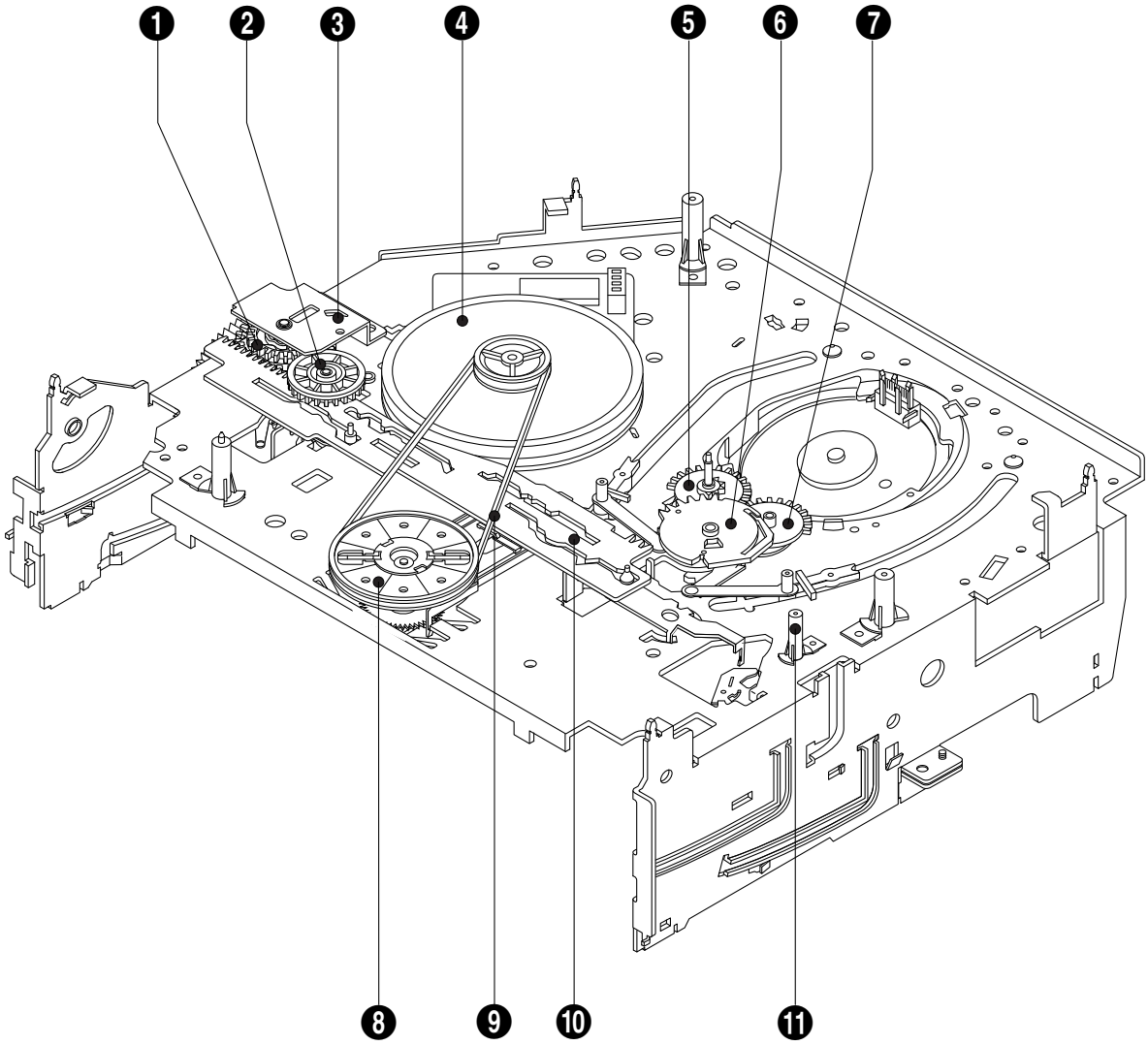


Fig. 1-3 Bottom Parts Location

1. GEAR JOINT 1
2. GEAR JOINT 2
3. BRAKET GEAR
4. MOTOR CAPSTAN ASS'Y
5. LEVER T LOAD ASS'Y
6. GEAR LOADING DRIVE
7. LEVER S LOAD ASS'Y
8. HOLDER CLUTCH ASS'Y
9. BELT PULLEY
10. SLIDER CAM
11. SLEEVE TENSION

1-2 Main Deck

1-2-1 Bracket FL Top Removal

1) Remove 2 screws ❶.
2) Remove the Bracket FL Top ❷.

Note : Take care not to change assembly direction.

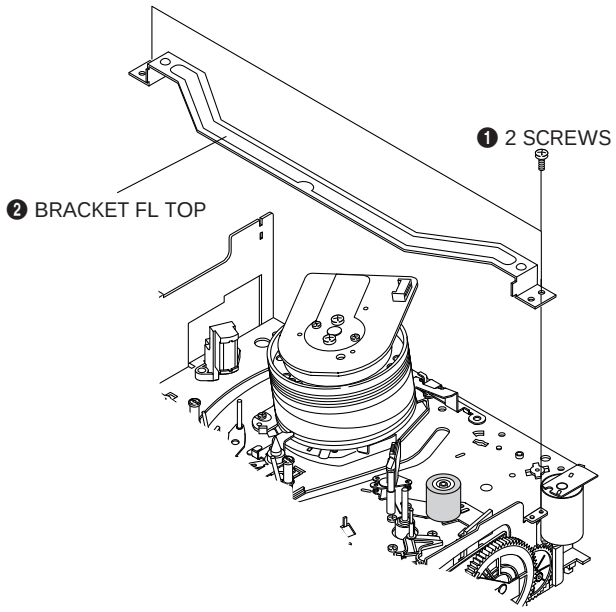


Fig. 1-4 Bracket FL Top Removal

1-2-2 Lever FL Door Removal

1) Rotate the Lever FL Door ❶ in the direction of arrow "A".
2) Release the Hook ❷, remove the Lever FL Door ❶ in the direction of arrow "B".

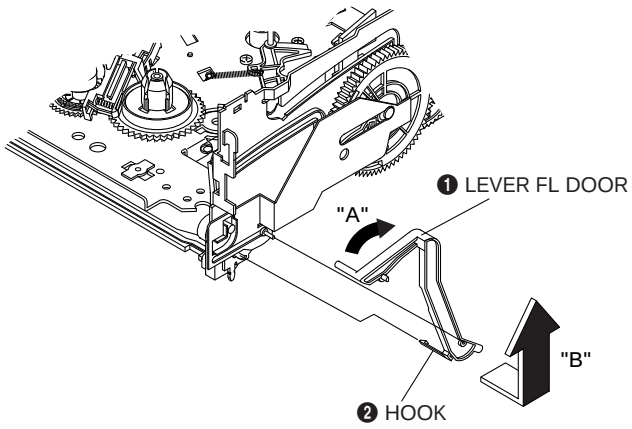


Fig. 1-5 Lever FL Door Removal

1-2-3 Holder FL Cassette Ass'y Removal

1) Remove the Lever FL Door. (Refer to Fig. 1-5)
2) Pull the Holder FL Cassette Ass'y ❶ to the eject position.
3) Pull the Holder FL Cassette Ass'y ❶ as grasping the Holder FL Cassette Ass'y ❶ and Lever FL Cassette-R ❷ in the same time to release hooking from Main Base until the Boss [A], [B] of Holder FL Cassette Ass'y ❶ is taken out from the Rail [C], [D].
4) Lift the Holder FL Cassette Ass'y ❶ in the direction of arrow "B" in this time, you have to grasp the Lever FL Cassette-R ❷ continuously until the Holder FL Cassette Ass'y ❶ is taken out completely.

Note : Be sure to insert Lever FL Cassette-R ❷ in the direction of "A" to prevent separation and breakage of the Lever FL Cassette-R ❷ at disassembling and reassembling.

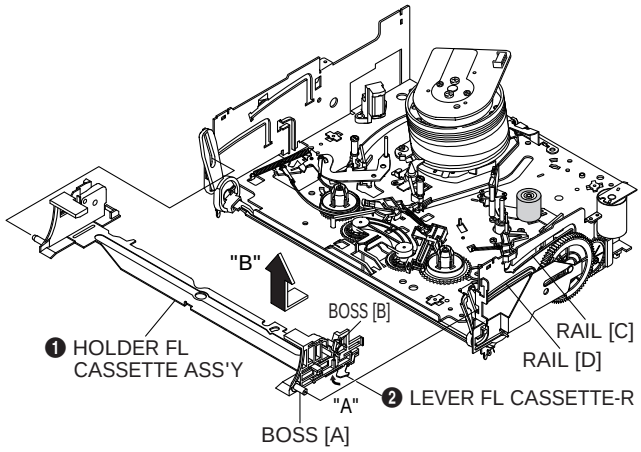


Fig. 1-6 Holder FL Cassette Ass'y Removal

1-2-4 Lever FL Arm Ass'y Removal

1) Remove the Lever FL Door. (Refer to Fig. 1-5)
2) Remove the Holder FL Cassette Ass'y. (Refer to Fig. 1-6)
3) Release the Hook ❶ in the direction of arrow "A", pull out the Lever FL Arm Ass'y ❹ from the Boss of Main Base.
4) Remove the Lever FL Arm Ass'y ❹ in the direction of arrow "B".

Assembly : When reinstalling, be sure to reassemble Lever FL Arm Ass'y ❹ after you insert the Boss ❷ in Groove [A] of Slider FL Drive ❸.

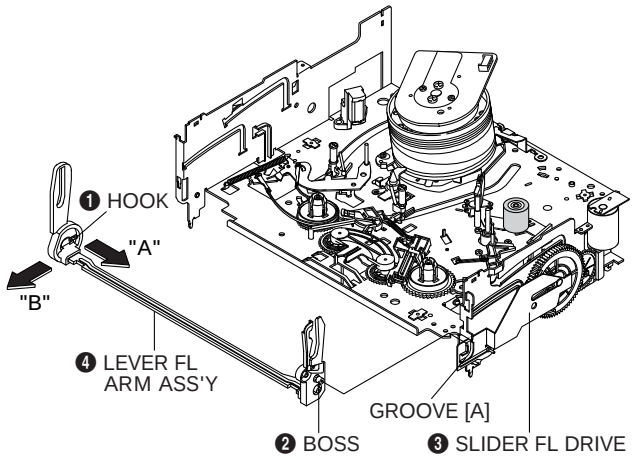


Fig. 1-7 Lever FL Arm Ass'y Removal

1-2-5 Slider FL Drive Removal

1) Pull the Slider FL Drive ❶ to the front direction.
2) Remove the Slider FL Drive ❶ in the direction of arrow. (Refer to Fig. 1-8)

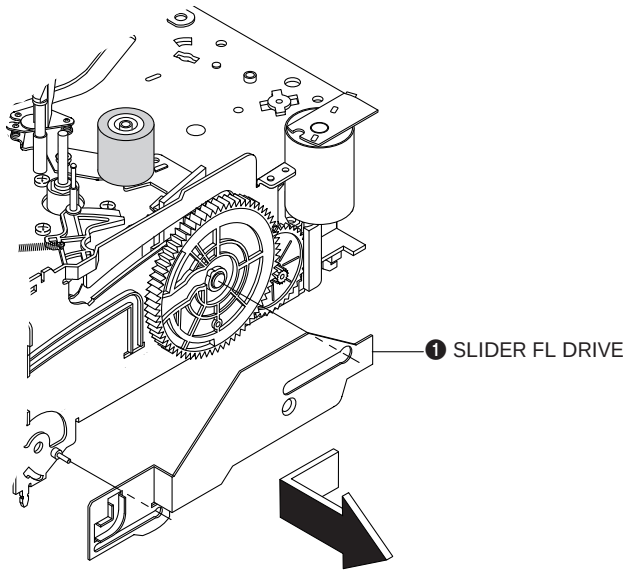


Fig. 1-8 Slider FL Drive Removal

1-2-6 Bracket Gear, Gear FL Cam, Gear Joint 1, 2 Removal

1) Remove screw ❶.
2) Lift the Bracket Gear ❷.
3) Remove the Gear FL Cam ❸.
4) Lift the Gear Joint 2 ❹, Gear Joint 1 ❺.

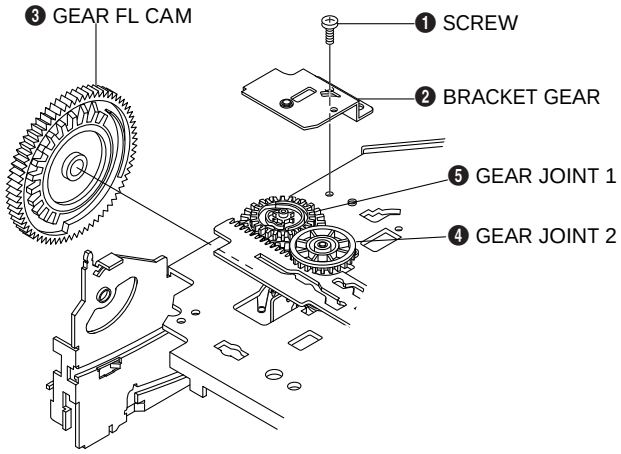


Fig. 1-9 Bracket Gear, Gear FL Cam, Gear Joint 1, 2 Removal

1-2-7 Assembly of Gear FL Cam, Gear Joint 1, 2

1) Be sure to align dot mark of Gear Joint 1 ❶ with dot mark of Gear Joint 2 ❷ as shown Fig. 1-10 (Refer to Timing Point 1), confirm the Timing Point 2 of the Gear Joint 2 ❷ and Slider Cam ❸.
2) Align the Gear FL Cam ❹ with the Gear Worm Wheel Post as shown detail drawing. (Refer to Timing Point 3)

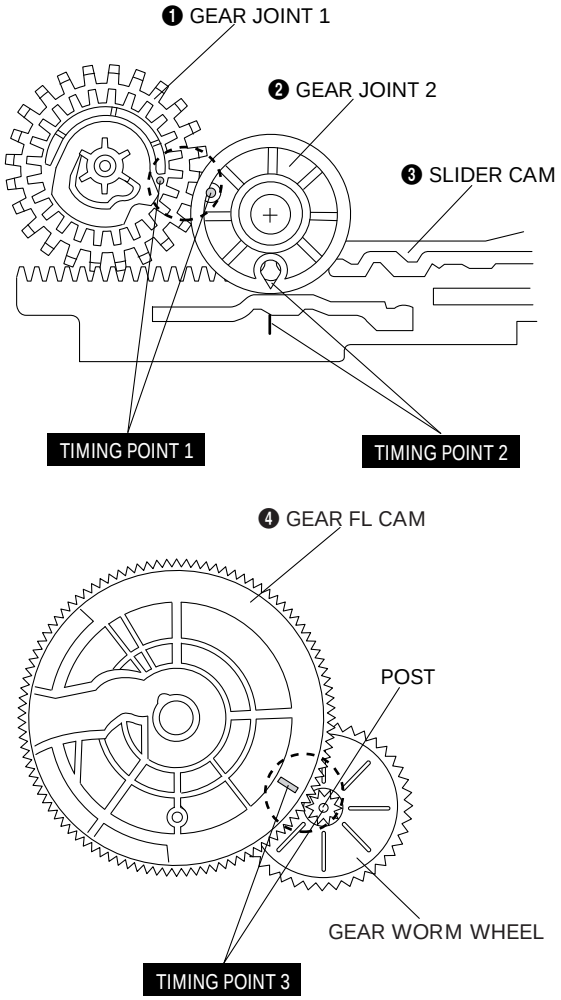


Fig. 1-10 Assembly of Gear FL Cam, Gear Joint 1,2

1-2-8 Holder Worm, Gear Worm, Gear Worm Wheel Removal

1) Release the Hook [A] in the direction of arrow and, remove the Holder Worm ❶.
2) Remove the Gear Worm ❷.
3) Remove the Gear Worm Wheel ❸. (After removing the Gear FL Cam as shown Fig. 1-9)

Note : Secure the Hook [A] after installing the Holder Worm ❶.

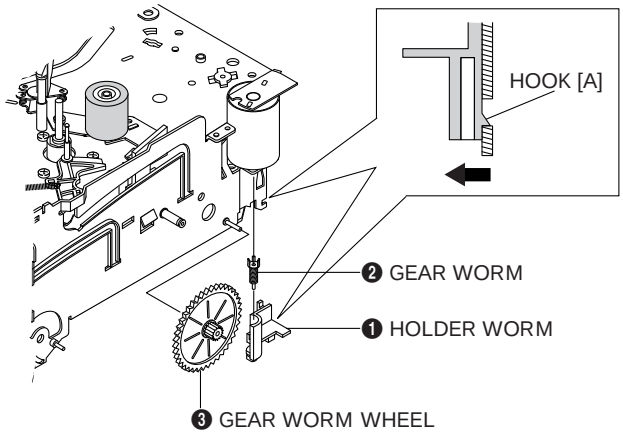


Fig. 1-11 Holder Worm, Gear Worm, Gear Worm Wheel Removal

1-2-9 Motor Loading Ass'y Removal

1) Remove the screw ❶.
2) Remove the Motor Loading Ass'y ❷.

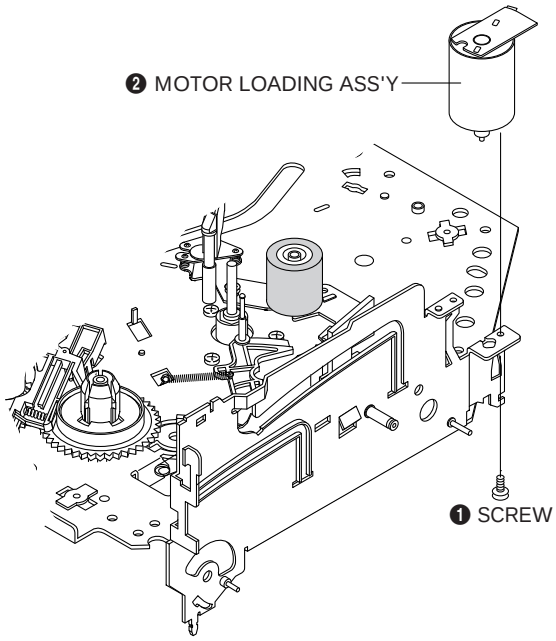


Fig. 1-12 Motor Loading Ass'y Removal

1-2-10 Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y Removal

1) Remove the Belt Pulley. (Refer to Fig. 1-29)
2) Remove the Gear Loading Drive ❶ after releasing Hook [A] in the direction arrow as shown in detail drawing.
3) Remove the Slider Cam ❷.
4) Remove the Lever T, S Load Ass'y ❸, ❹.

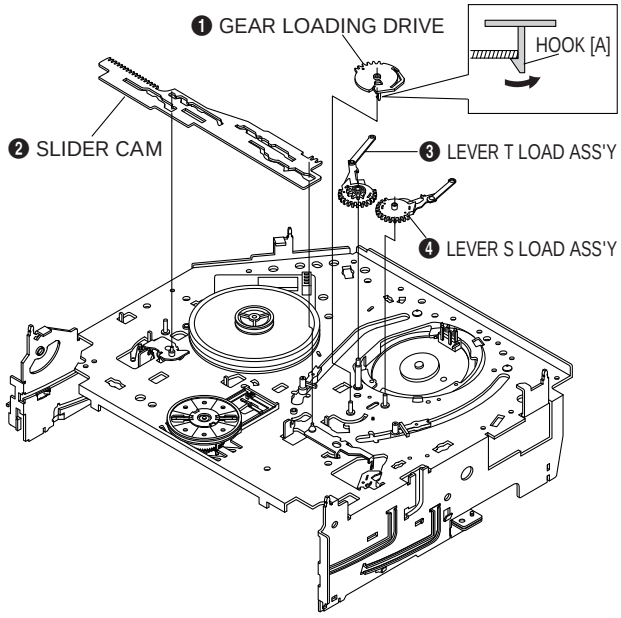


Fig. 1-13 Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y Removal

1-2-11 Assembly of Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y

1) When reinstalling, be sure to align dot of Lever T Load Ass'y ❶ with dot of Lever S Load Ass'y ❷ as shown in drawing. (Refer to Timing Point 1)
2) Insert the Pin A, B, C, D into the Slider Cam ❸ hole.
3) Be sure to align dot of Lever T Load Ass'y and dot of Gear Loading Drive ❹. (Refer to Timing Point 2)
4) Align dot of Gear Loading Drive with mark of Slider Cam as shown in drawing. (Refer to Timing Point 3)

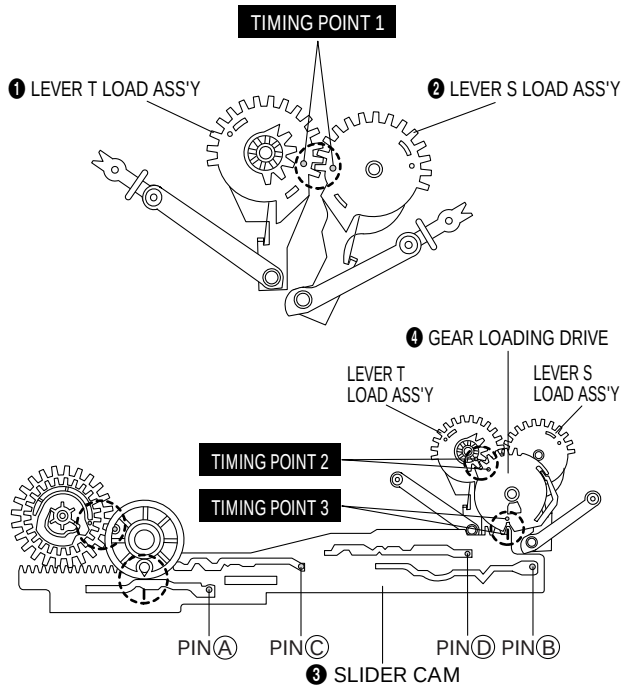


Fig. 1-14 Assembly of Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y

1-2-12 Lever Tension Ass'y, Band Brake Ass'y, Sleeve Tension Removal

1) Remove the Spring Tension ❶.
2) In bottom side of Deck, remove the Sleeve Tension ❷ after rotating it right or left as lifting locking edge of Sleeve Tension.
3) Remove the side "a" of the Band Brake Ass'y ❹ in the direction of arrow "A" from the Lever Tension Ass'y ❸.
4) Remove the side "b" of the Band Brake Ass'y ❹ in the direction of arrow "B" from the Main Base.

Note :
1) When replacing the Lever Tension Ass'y, be sure to apply oil in the Sleeve Tension.
2) Take care not to touch stain on the felt side, and not to be folded and broken Band Brake Ass'y.

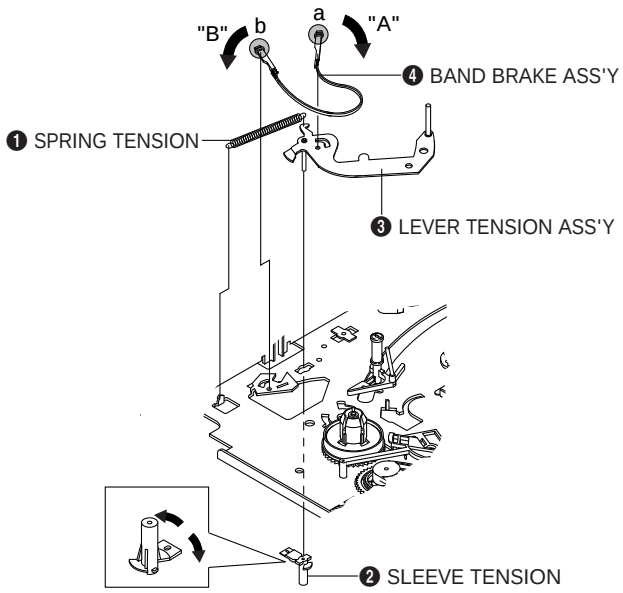


Fig. 1-15 Lever Tension Ass'y, Band Brake Ass'y, Sleeve Tension Removal

1-2-13 Lever S, T Brake Ass'y Removal

1) Release the Hook [A] and the Hook [B], [C] in the direction of arrow as shown in Fig. 1-16.
2) Lift the Lever S, T Brake Ass'y ❶, ❷ with Spring Brake ❸.

Assembly :
1) Assembly the Lever S Brake Ass'y ❶ on the Main Base.
2) Assembly the Lever T Brake Ass'y ❷ with Spring Brake ❸.

Note : Take extreme care not to be folded and transformed spring Brake at removing or reinstalling.

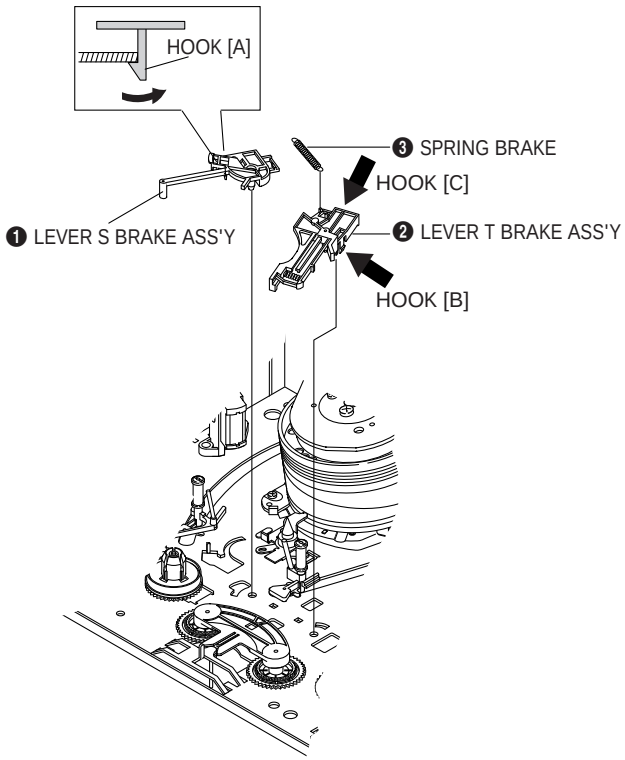


Fig. 1-16 Lever S, T Brake Ass'y Removal

1-2-14 Lever Idle Ass'y Removal

1) Push the Lever Idle ❶ in the direction of arrow "A", "B".
2) Lift the Lever Idle ❶.

Assembly :
1) Apply oil in two Bosses of Lever Idle ❶.
2) Assemble the Gear Idle ❷ with the Lever Idle ❶.

Note : When replacing the Gear Idle ❷, be sure to add oil in the boss of Lever Idle ❶.

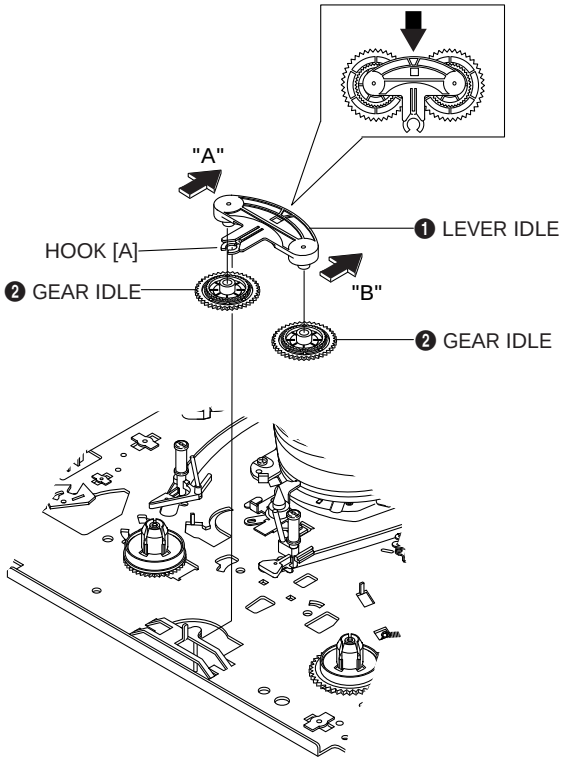


Fig. 1-17 Lever Idle Ass'y Removal

1-2-15 Disk S, T Reel Removal

1) Lift the Disk S, T Reel ❶, ❷.

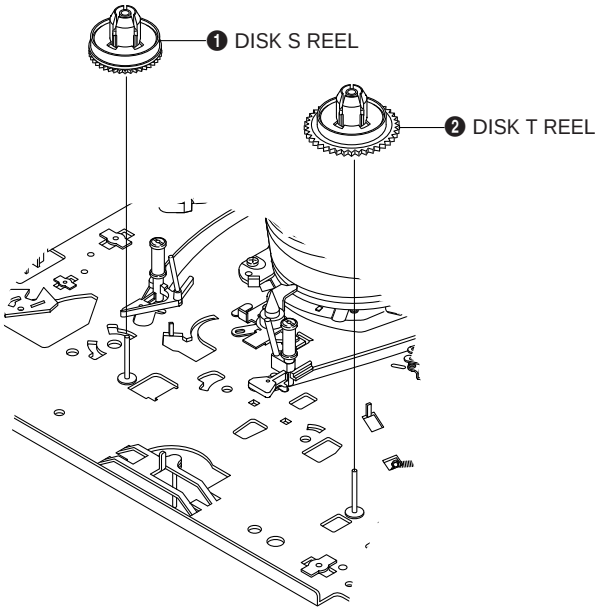


Fig. 1-18 Disk S, T Reel Removal

1-2-16 Holder Clutch Ass'y Removal

1) Remove the Washer Slit ❶.
2) Lift the Holder Clutch Ass'y ❷.

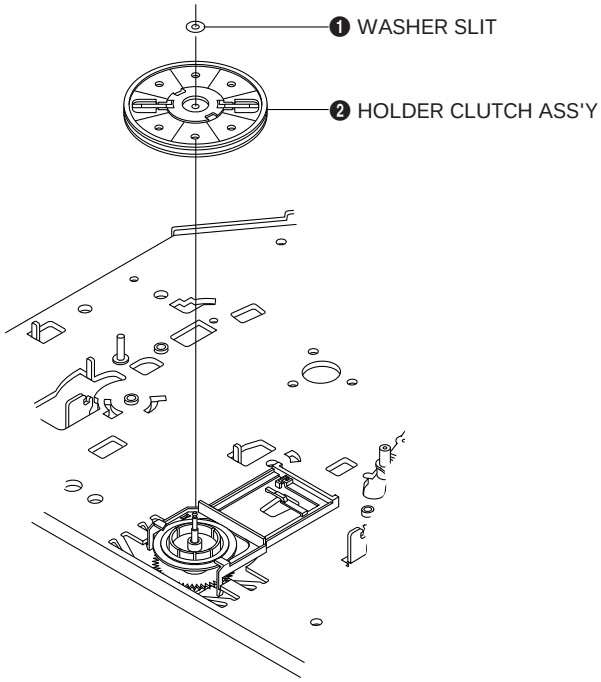


Fig. 1-19 Holder Clutch Ass'y Removal

1-2-17 Lever Up Down Ass'y, Gear Center Ass'y Removal

1) Remove the 2 hooks in the direction of arrow as shown Fig. 1-20 and lift the Lever Up Down Ass'y ❶.
2) Lift the Gear Center Ass'y ❷.

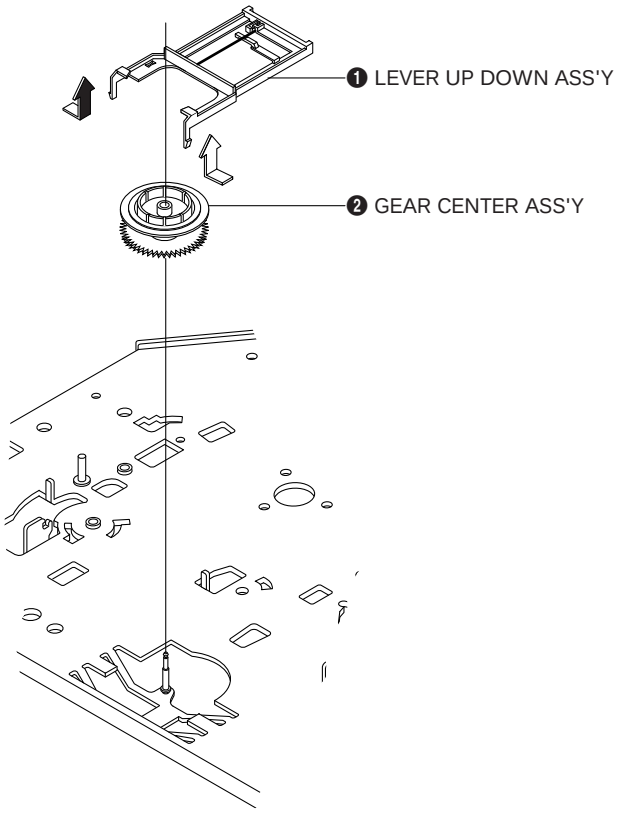


Fig. 1-20 Lever Up Down Ass'y, Gear Center Ass'y Removal

1-2-18 Assembly of Lever Up Down Ass'y, Gear Center Ass'y

1) Insert the Lever Up Down Ass'y ❶ in the 2 rectangular holes on Main Base.
2) Lift the Lever Up Down Ass'y ❶ about 35 degree. (Refer to Fig. 1-21)
3) Insert Ring ❹ of the Gear Center Ass'y ❷ in the Guide ❺ of the Lever Up Down Ass'y ❶.
4) Insert the Gear Center Ass'y ❷ in the post ❻ on Main Base.
5) Push down the Lever Up Down Ass'y ❶ for locking of the Hook ❼.

Note :
1) Take care not to separate and loose the Spring Up Down.
2) When assembling the Gear Center Ass'y, don't push down too much.

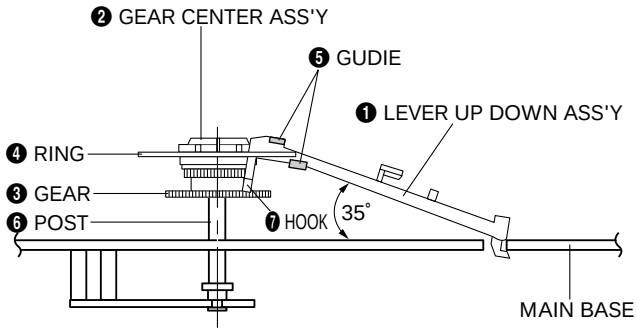


Fig. 1-21 Assembly of Lever Up Down Ass'y, Gear Center Ass'y

1-2-19 Guide Cassette Door Removal

1) Lift the Hook [A].
2) Rotate the Guide Cassette Door ❶ in the direction of arrow.

Note : After reinstalling the Guide Cassette Door ❶ secure the Hook [A].

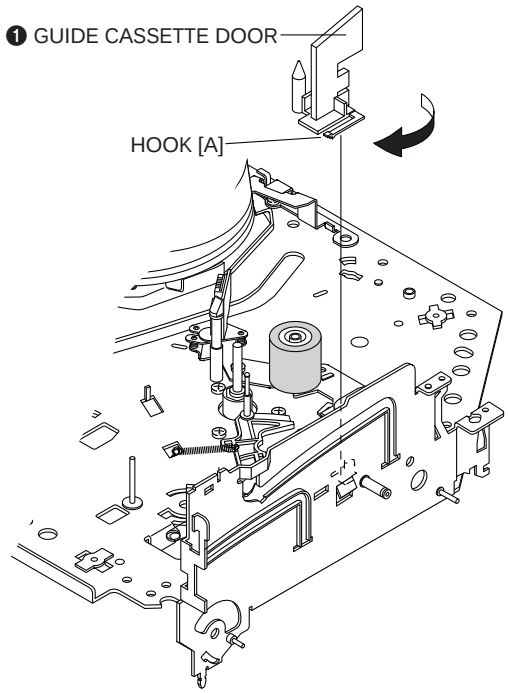


Fig. 1-22 Guide Cassette Door Removal

1-2-20 Unit Pinch Ass'y, Plate Joint, Spring Pinch Drive Removal

1) Lift the Unit Pinch Ass'y ❶.
2) Remove the Plate Joint ❷ from Lever Pinch Drive.
3) Remove the Spring Pinch Drive ❸.

Note :
1) Take extreme care not to touch the grease on the Roller Pinch.
2) When reinstalling, be sure to apply grease on the post pinch roller.

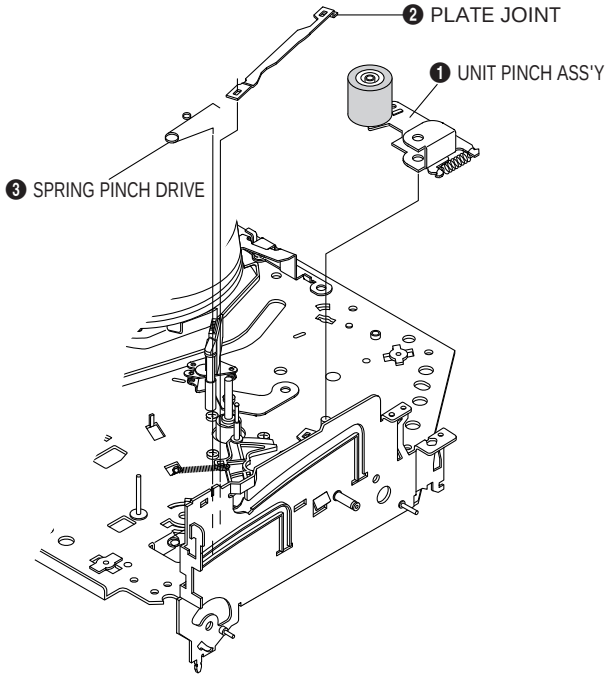


Fig. 1-23 Unit Pinch Ass'y, Plate Joint, Spring Pinch Drive Removal

1-2-21 Lever #9 Guide Ass'y Removal

1) Remove the Spring #9 Guide ❶.
2) Lift the Lever #9 Guide Ass'y ❷ in the direction of arrow.

Note :
1) Take extreme care not to touch the grease on the tape Guide Post.
2) After reinstalling, check the bottom side of the Post #9 Guide to stick to the top side of Main Base.

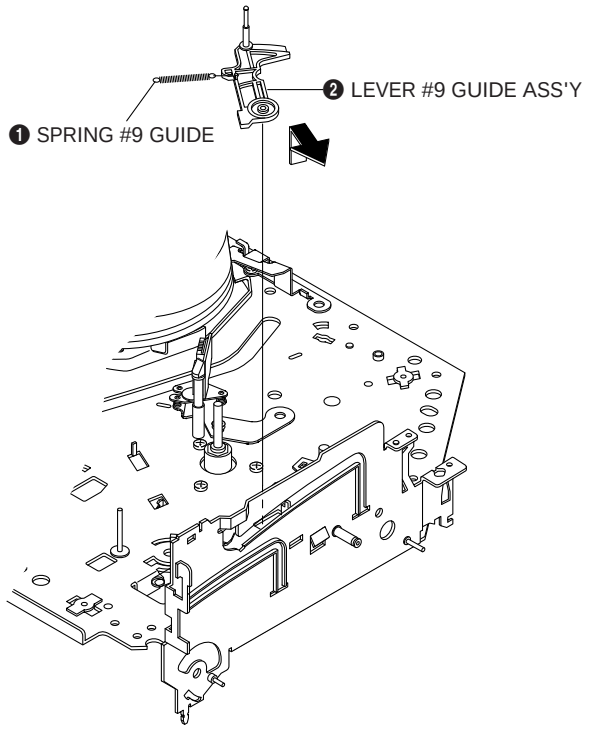


Fig. 1-24 Lever #9 Guide Ass'y Removal

1-2-22 FE Head Removal

1) Remove the screw ❶.
2) Lift the FE Head ❷.

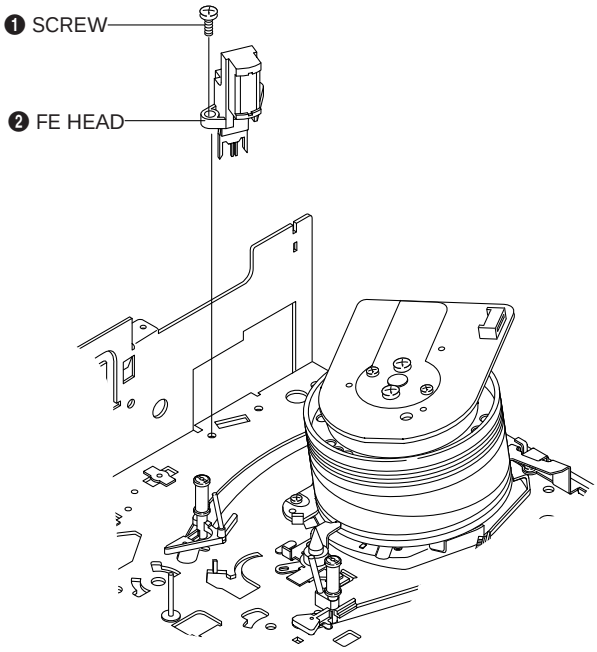


Fig. 1-25 FE Head Removal

1-2-23 ACE Head Removal

1) Pull out the FPC from connector of ACE Head Ass'y ❷.
2) Remove the screw ❶.
3) Lift the ACE Head Ass'y ❷.

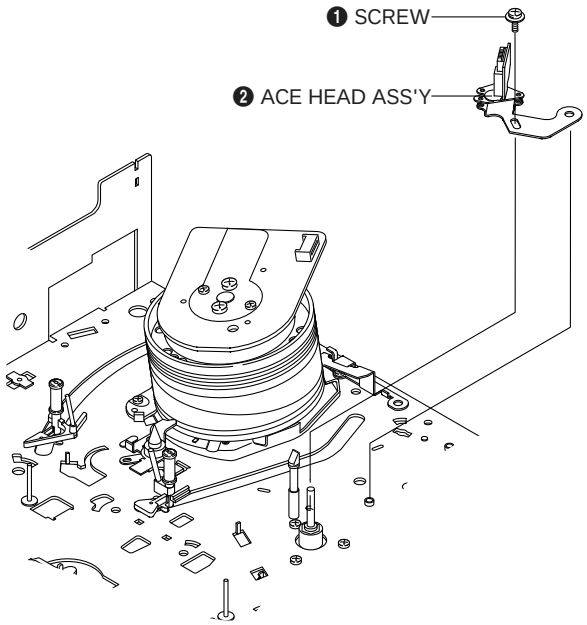


Fig. 1-26 ACE Head Removal

1-2-24 Slider S, T Ass'y Removal

1) Move the Slider S, T Ass'y ❶, ❷ to slot, and then lift it to remove. (Refer to arrow)

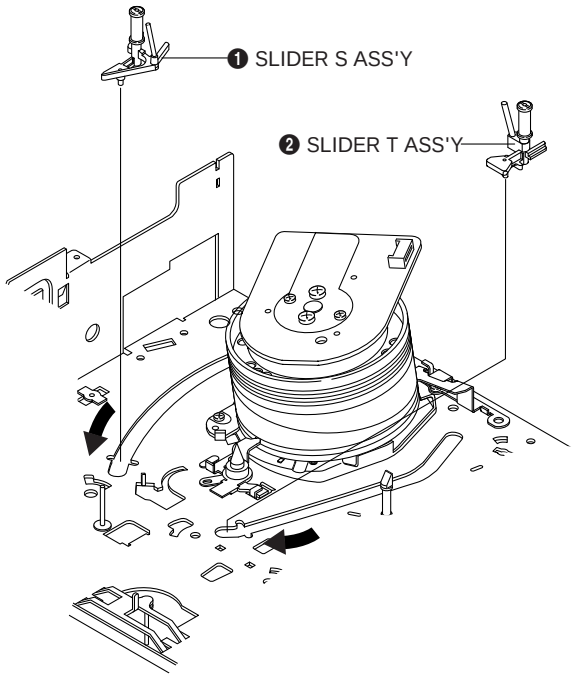


Fig. 1-27 Slider S, T Ass'y Removal

1-2-25 Cylinder Ass'y Removal

1) Remove the 3 Screws ❶, ❸, ❺.
2) Remove the Plate Cylinder A, B, C ❷, ❹, ❻ in the direction of arrow.
3) Lift the Cylinder Ass'y ❼.

Note :
1) When reinstalling, push the Plate Cylinder A, B ❹, ❻ in the reverse of arrow and then, tighten the 2 Screws ❸, ❺.
2) Take care not to touch the Cylinder Ass'y and the tape guide post at reinstalling Plate Cylinder C ❷.
3) Take care not to touch the Cylinder Ass'y with screw driver at reinstalling the Plate Cylinder C ❷.

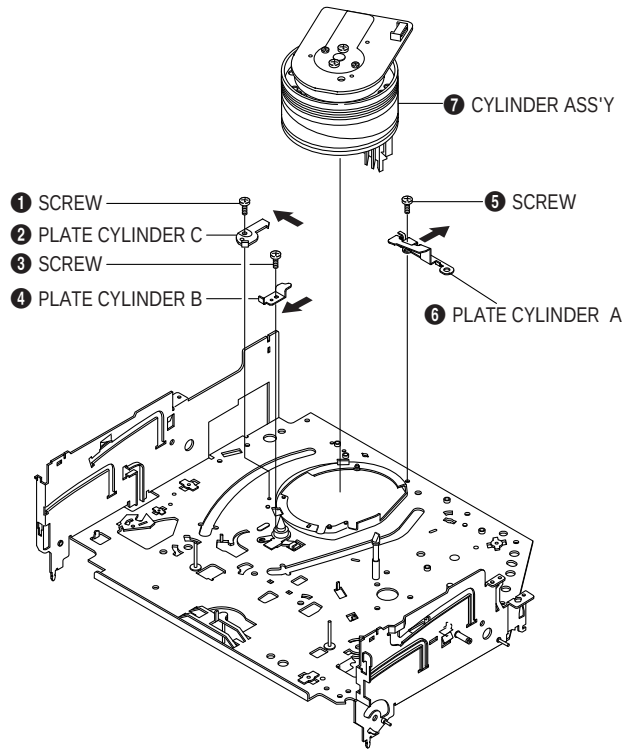


Fig. 1-28 Cylinder Ass'y Removal

1-2-26 Belt Pulley Removal

1) Remove the Belt Pulley ❶.

Note : Take extreme care not to touch the grease on Belt Pulley ❶ at assembling or reassembling.

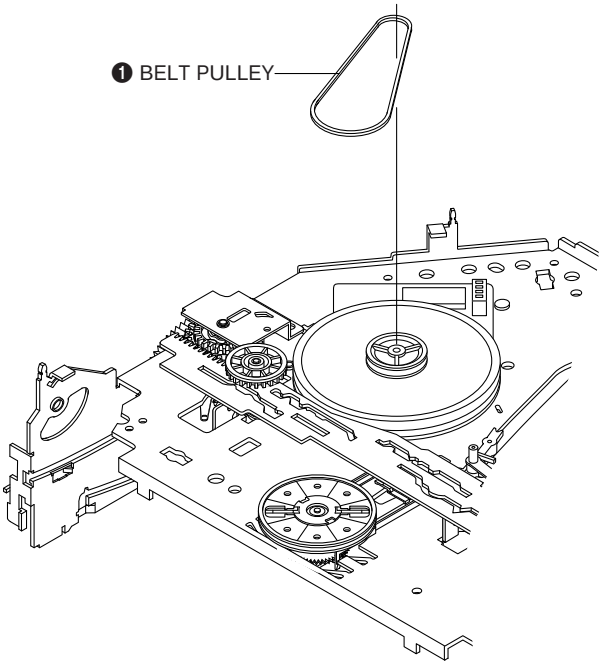


Fig. 1-29 Belt Pulley Removal

1-2-27 Lever Head Cleaner Ass'y Removal (Optional)

1) Release the Hook ❶.
2) Lift the Lever Head Cleaner Ass'y ❷.

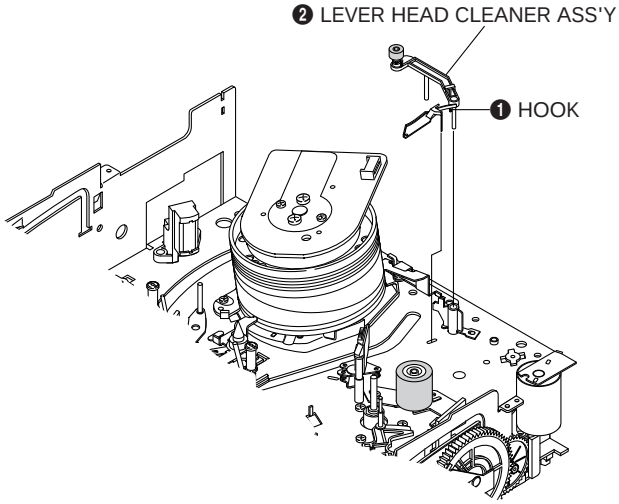


Fig. 1-30 Lever Head Cleaner Ass'y Removal

1-2-28 Motor Capstan Ass'y Removal

1) Remove the 3 Screws ❶.
2) Remove the Motor Capstan Ass'y ❷.

Assembly :
1) Match the 3 holes of Motor Capstan Ass'y ❷ to the 3 holes of Main Base as attending not to drop or knock the Motor Capstan Ass'y.
2) Tighten the 3 Screws in the direction of arrow as shown detail drawing.

Note :
1) Don't reuse the removed screws from Motor Capstan Ass'y.
2) After tightening screws, check if there is gap between the head of screws and the top side of Main Base. There should have no gap between the head of screws and the top side of Main Base.
3) After reinstalling, adjusting the tape transport system again.

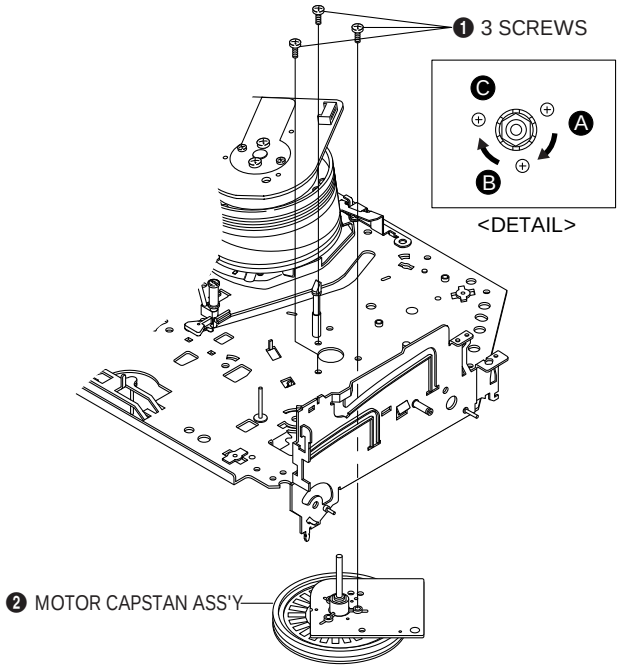


Fig. 1-31 Motor Capstan Ass'y Removal

1-2-29 How to Eject the Cassette Tape (If the unit does not operate on condition that is inserted into housing ass'y)

1) Remove the Holder worm ❶ and the Gear Worm ❷.
2) Turn the Gear Worm Wheel ❸ counterclockwise with screw driver. (Refer to arrow)

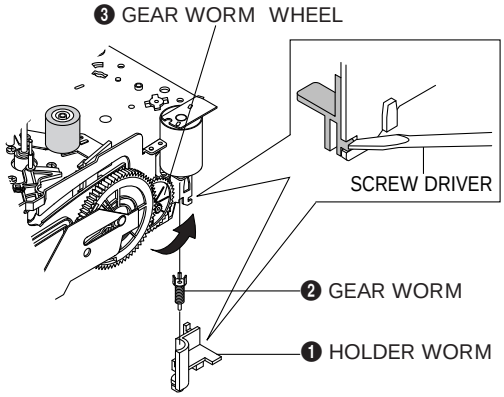


Fig. 1-32

3) When Slider S, T are approached in the position of unloading, rotate holder Clutch counterclockwise after inserting screw driver in the hole of frame's bottom in order to wind the unwounded tape. (Refer to Fig. 1-33)
(If you rotate Gear Worm Wheel continuously when tape is in state of unwinding, you may cause a tape contamination by grease and tape damage. Be sure to wind the unwounded tape in the state of set horizontally.)
4) Rotate Gear Worm Wheel ❸ counterclockwise using screw driver again up to the state of eject mode and then pick out the tape. (Refer to Fig. 1-32)

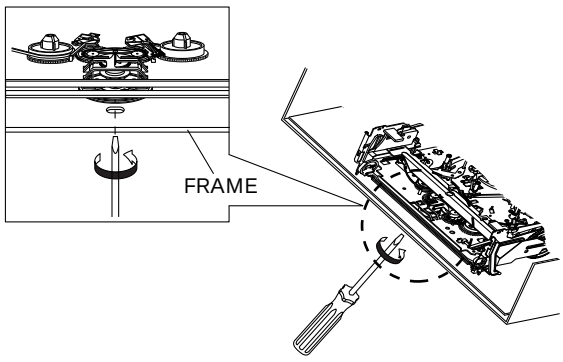


Fig. 1-33

1-3 The table of clearing, Lubrication and replacement time about principal parts

1) The replacement time of parts is not life of parts.
2) The table 1-1 is that the VCR Set is in normal condition (normal temperature, normal humidity).
   The checking period may be changed owing to the condition of use, runtime and environmental conditions.
3) Life of the Cylinder Ass'y is depend on the condition of use.
4) See exploded view for location of each parts.

<Table 1-1>

*	Parts Name	Checking Period										Remark
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000	
TAPE PATH SYSTEM	POST TENSION	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	- To clean the parts, use patch and alcohol (solvent). - After cleaning, use the video tape after alcohol is gone away completely. - We recommend to use oil [EP-56] or solvent. - One or two drops of oil should be applied after cleaning with alcohol.
	SLANT POST S, T	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#8 GUIDE SHAFT	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	CAPSTAN SHAFT	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#9 GUIDE POST	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#3 GUIDE POST	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	GUIDE ROLLER S, T	Δ	Δ	Δ	O	O	O	O	O	O	O	
	CYLINDER ASS'Y	Δ	O	O	O	O	O	O	O	O	O	
	FE HEAD	Δ	Δ	Δ	O	O	O	O	O	O	O	
	ACE HEAD	Δ	O	O	O	O	O	O	O	O	O	
	PINCH ROLLER	Δ	O	O	O	O	O	O	O	O	O	
	POST REEL S, T		◆		◆		◆		◆		◆	- Periodic time of applying oil (Apply oil after cleaning) - The excessive applying oil may be the cause of malfunction.
	SLEEVE TENSION		◆		◆		◆		◆		◆	
	POST CENTER		◆		◆		◆		◆		◆	
	LEVER IDLE BOSS (2Point)		◆		◆		◆		◆		◆	
DRIVING SYSTEM	CAPSTAN MOTOR PULLEY	Δ	Δ	Δ	Δ	Δ	O	O	O	O	O	
	BELT PULLEY				O	O	O	O	O	O	O	
	HOLDER CLUTCH ASS'Y	Δ	O	O	O	O	O	O	O	O	O	
	GEAR CENTER ASS'Y		O	O	O	O	O	O	O	O	O	
	GEAR IDLE (2Point)		O	O	O	O	O	O	O	O	O	
	LOADING MOTOR		O	O	O	O	O	O	O	O	O	
BRAKE SYSTEM	BAND BRAKE ASS'Y		O	O	O	O	O	O	O	O	O	
	BRAKE T ASS'Y		O	O	O	O	O	O	O	O	O	

Δ : Cleaning O : Check and replacement in necessary ◆ : Add Oil

2. Alignment and Adjustment

2-1 Tape Transport System and Adjustment Locations

The tape transport system has been adjusted precisely in the factory. Alignment is not necessary except for the following :
1) Noise observed on the screen.
2) Tape damage.
3) Parts replacement in the tape transport system.

Lower flange height of tape guide is used as the reference for the transport adjustment.
To maintain the height of the tape guide and prevent damage, do not apply excessive force onto the main base.

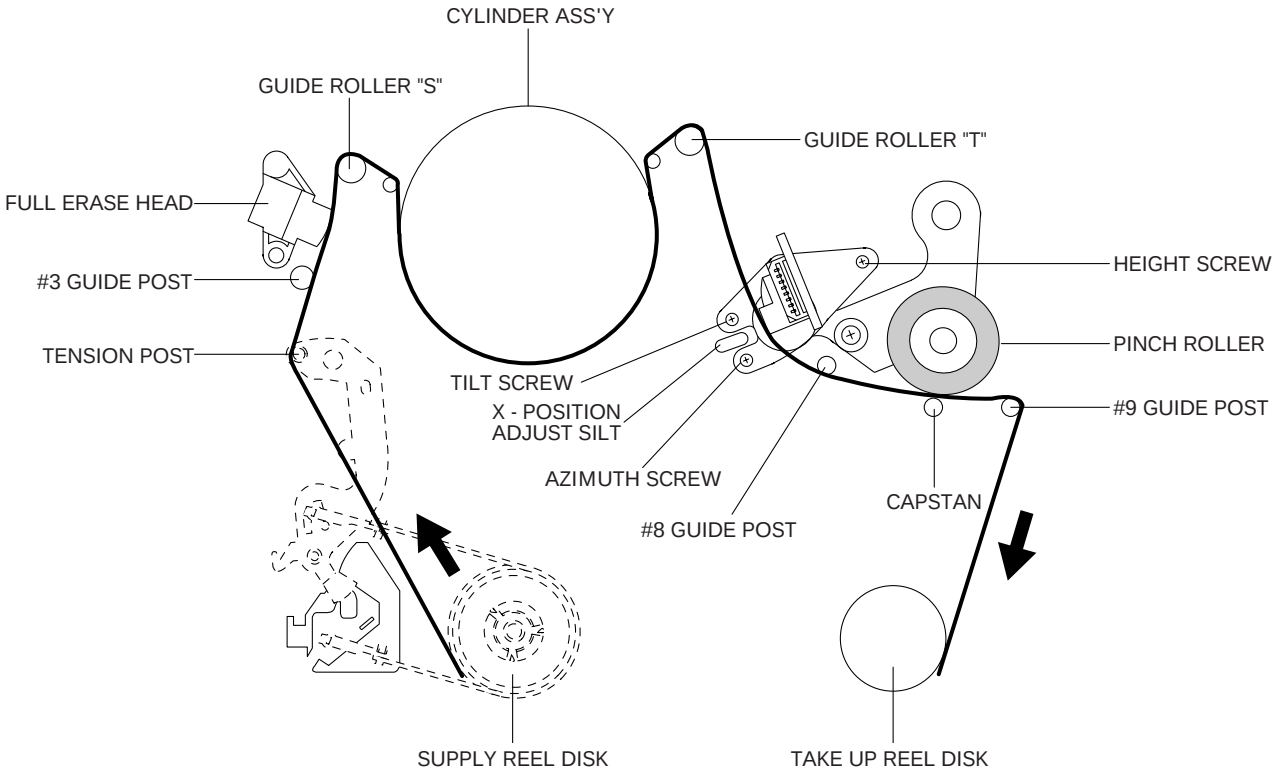


Fig. 2-1 Location of Tape Transport Adjustment

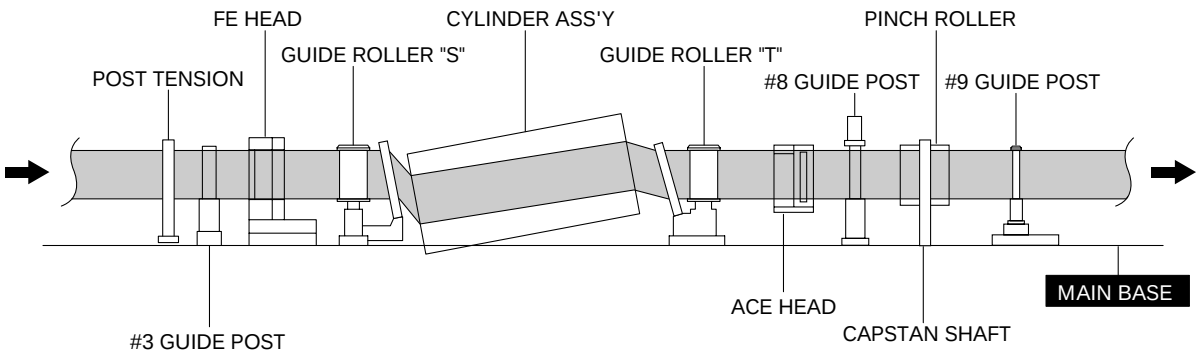


Fig. 2-2 Tape Travel Diagram

2-2 Tape Transport System Adjustment

When parts are replaced, perform the required adjustments by referring to procedures for the tape transport system. If there are any changes to the tape path, first run a T-120 tape and make sure excessive tape wrinkle does not occur at the tape guides.

1) If tape wrinkle is observed at the guide roller S, T, turn the guide roller S, T until wrinkle disappears.
2) If the tape wrinkle is still observed at the tape guide, perform the tilt adjustment of the ACE head. (See page 5-3 of the Service Manual for Test Point Locations.)

2-2-1 ACE Head Assembly Adjustment

2-2-1(a) ACE HEAD HEIGHT ADJUSTMENT

1) Run the alignment tape (Color bar) in the playback mode.
2) Observe surface of the audio head using a dental mirror.
3) Turn screw (C) clockwise or counterclockwise until the gap of lower tape edge and the lower edge of the control head is about 0.25mm. (Refer to Fig. 2-3 and 2-4)

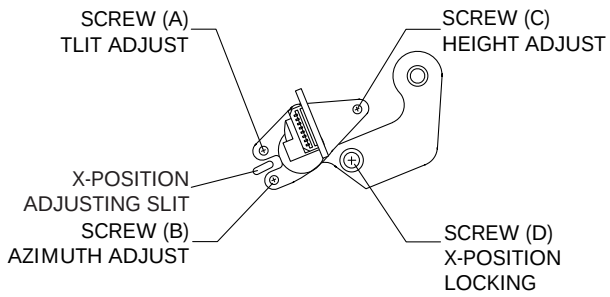


Fig. 2-3 Location of ACE Head Adjustment Screw

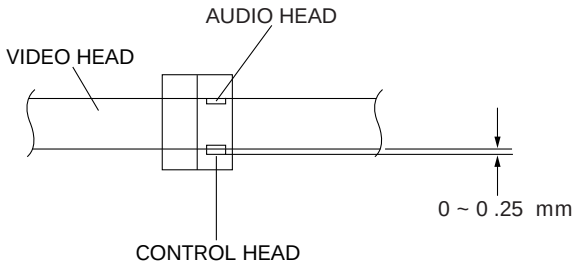


Fig. 2-4 ACE Head Height Adjustment

2-2-1(b) ACE HEAD TILT ADJUSTMENT

1) Playback a blank tape and observe the position of the tape at the lower flange of tape guide.
2) Confirm that there is no curl or wrinkle at the lower flange of tape guide as shown in Fig. 2-5 (B).
3) If a curl or wrinkle of the tape occurs, slightly turn the screw (A) tilt adjust on the ACE head ass'y.
4) Reconfirm the ACE head height.

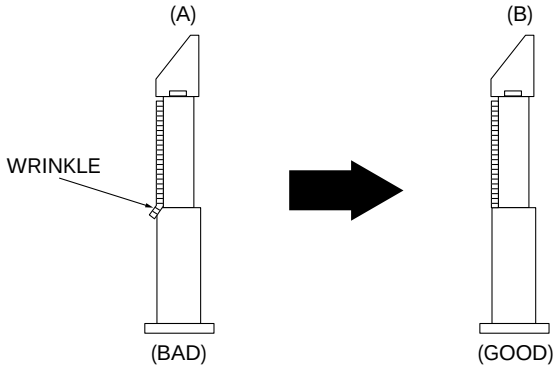


Fig. 2-5 Tape Guide Check

2-2-1(c) AUDIO AZIMUTH ADJUSTMENT

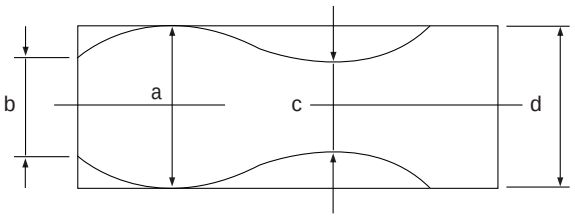
1) Load alignment tape (Mono scope) and playback the NTSC : 7KHz (PAL : 6KHz) signal.
2) Connect channel-1 scope probe to audio output test point.
3) Adjust screw (B) to achieve maximum audio level. (See Fig. 2-3)

2-2-1(d) ACE HEAD POSITION (X-POINT) ADJUSTMENT

1) See page 5-1 of the Service Manual for ACE Head position (X-Point) adjustment.

2-2-2 Linearity adjustment (Guide roller S, T adjustment)

1) Playback the Mono Scope alignment tape (SP mode).
2) Observe the video envelope signal on an oscilloscope (triggered by the video switching pulse).
3) Make sure the video envelope waveform (at its minimum) meets the specification shown in Fig. 2-6.
   If it does not, adjust as follows :



a b c d
c,b,d/a ≧ 63%

Fig. 2-6 Envelope Waveform Adjustment

Note :
a=Maximum output of the video RF envelope.
b=Minimum output of the video RF envelope at the entrance side.
c=Minimum output of the video RF envelope at the center point.
d=Maximum output of the video RF envelope at the exit side.

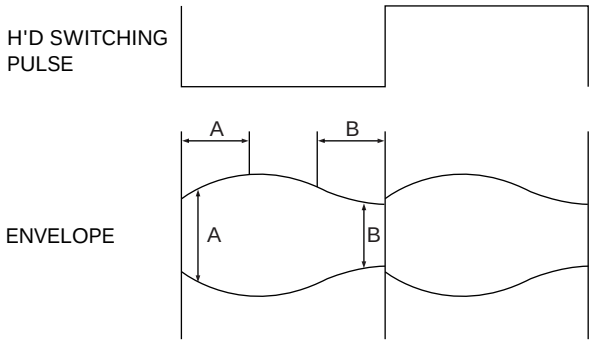


Fig. 2-7 Adjustment Points

4) If the section A in Fig. 2-7 does not meet the specification, adjust the guide roller S up or down.
5) If the section B in Fig. 2-7 does not meet the specification, adjust the guide roller T up or down.
6) Play back the Mono Scope alignment tape (SP mode).
7) Connect an oscilloscope CH-1 to the Envelope and CH-2 to the H'D SW Pulse for triggering.
8) Turn the guide roller heads with a flat head (▬) driver to obtain a flat video RF envelope as shown in Fig. 2-8.

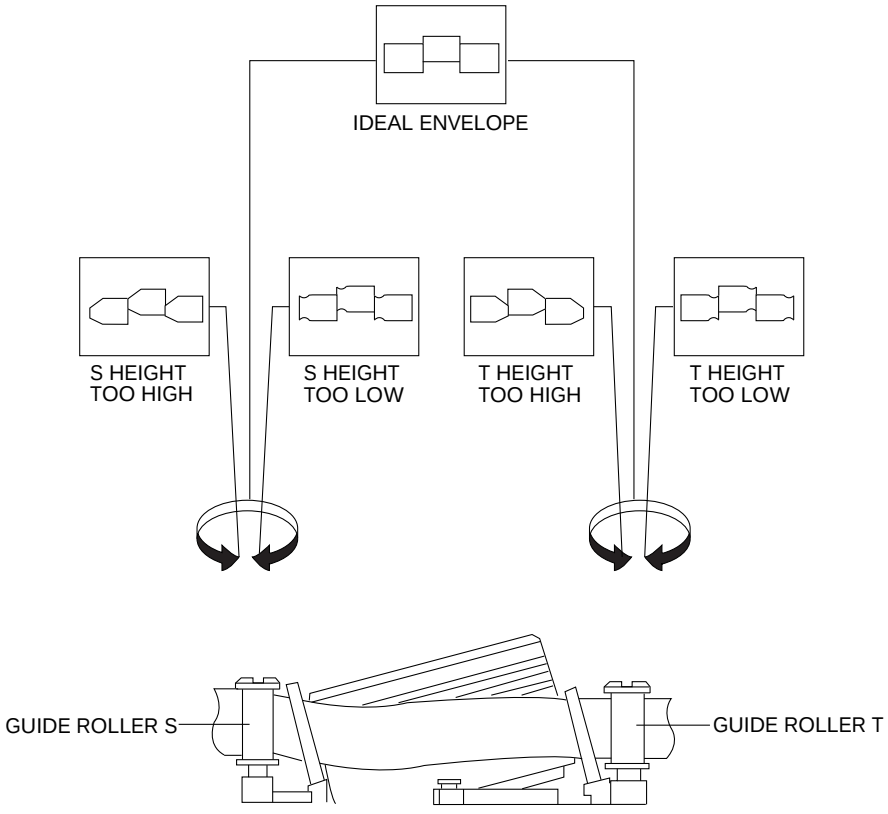


Fig. 2-8 Guide Roller S, T Height Adjustment

2-2-3 Check Transitional Operation from RPS to Play

Check transition from RPS mode to play mode :
Using a pre-recorded SP tape, make sure the entry side of envelope comes to an appropriate steady state within 3 seconds (as shown in Fig. 2-9).
If the envelope waveform does not reach specified peak-to peak amplitude within 3 seconds, adjust as follows :

1) Make sure there is no gap between the supply roller lower flange and the tape.
   If there is a gap, adjust the supply guide roller again.
2) Change operation mode from the RPS to the play mode (again) and make sure the entry side of envelope rises within 3 second.

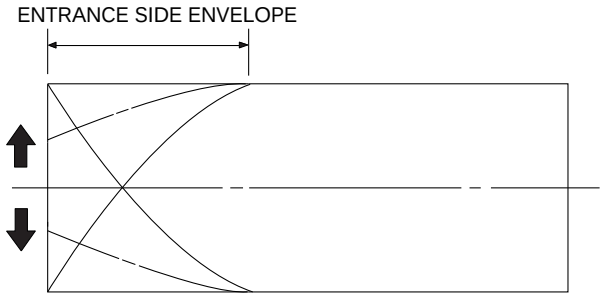


Fig. 2-9 Video Envelope Rising when Operation mode Changes from RPS to Play Mode

2-2-4 Envelope Check

1) Make recordings on T-120 (E-120) and T-160 (E-180) tape.
   Make sure the playback output envelope meets the specification as shown in Fig. 2-10.
2) Play back a self recorded tape (recording made on the unit using with T-120 (E-120).
   The video envelope should meet the specification as shown in Fig. 2-10.
   In SP mode, (A) should equal (B).
   If the head gap is wide, upper cylinder should be checked.

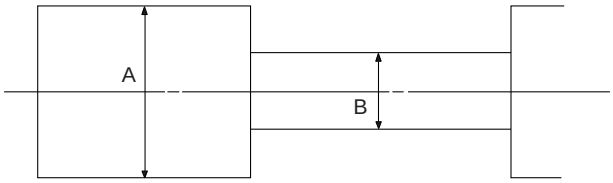


Fig. 2-10 Envelope Output and Output Level

2-2-5 Tape Wrinkle Check

1) Run the T-160 (E-180) tape in the playback, FPS, RPS and Pause modes and observe tape wrinkle at each guide.
2) If excessive tape wrinkle is observed, perform the following adjustments in Playback mode :

- Tape wrinkle at the guide roller S, T section : Linearity adjustment.
- Tape wrinkle at tape guide flange : ACE head assembly coarse adjustment.

2-3 Reel Torque

1) The rotation of the capstan motor causes the Holder Clutch Ass'y to rotate through the Belt Pulley.
2) The spring wrap PLAY/REV of holder clutch ass'y drives the disk reel S, T through gear idle by rotation of gear center ass'y.
3) Brake is operated by slider cam at FF/REW mode.
4) Transportation of accurate driving force is done by gears. (Gear Center Ass'y)

Note : If the spec. does not meet the followings specifications, replace the holder clutch ass'y and then recheck.

<Table 2-1>

MODE	TORQUE g/cm		GAUGE
PB	NTSC	82.5 ± 27.5	Cassette Torquemeter
	PAL	79 ± 27	
RPS	145 ± 30		Cassette Torquemeter

2-4 Location adjustment and Confirmation of Tension Post

1) Remove the holder cassette ass'y and then push the lever FL Arm-R to the direction of loading.
2) Push the lever tension drive ❶ in the direction of arrow. (See Fig. 2-11)
3) Turn the gear worm wheel ❷ clockwise so that "Timing Point" of the slider FL drive ❸ and gear FL cam ❹ can be aligned (See Fig. 2-12)

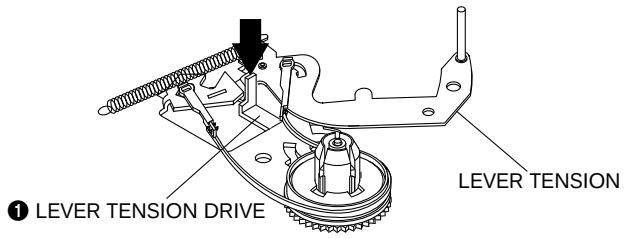


Fig. 2-11

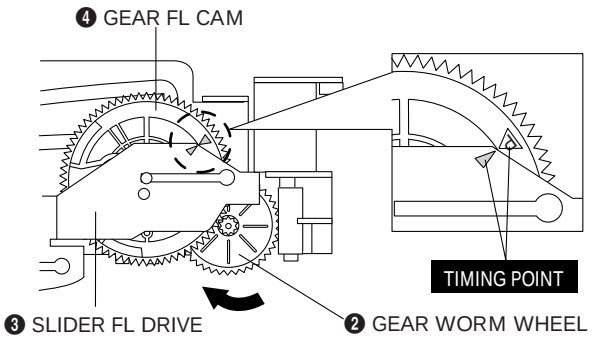


Fig. 2-12

4) As rotating Disk S Reel ❶ clockwise and the region of adjusting in the Main Base (in shape of slit) clockwise or counterclockwise after inserting screw driver in the slit on Main Base. Adjust the left end edge of Lever Tension Ass'y ❸ to 1.3 +1.5/-0.5mm from the location of mark in the Main Base.
5) As rotating Disk S Reel ❶, double-check the location of the left end edge of Lever Tension Ass'y and the quantity of crossing from mark on Main Base. (+1.0/-0.5mm)

Counterclockwise : Torque UP
Clockwise : Torque DOWN

Back Tension should be 56 ± 15g.cm at inspecting it with Back Tension Meter.

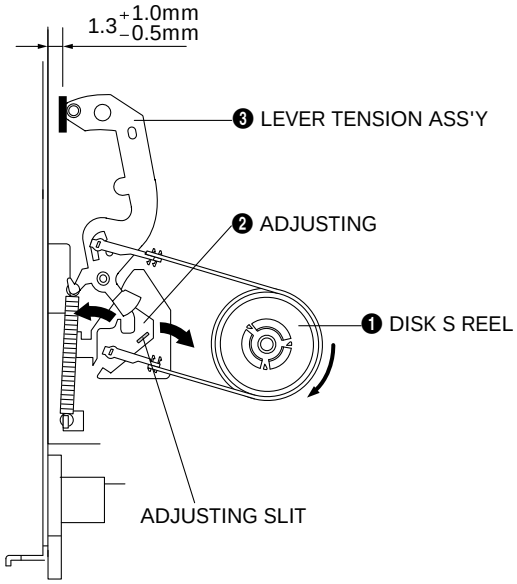


Fig. 2-13 Tension Pole and Back Tension Adjustment

Note :
1) Mark on Main Base is located in about 1.3mm from inside of bending line.
2) Be careful not to deform the region of adjusting on Main Base up and down at adjusting.

MEMO

SAMSUNG

VIDEO CASSETTE RECORDER

SV-7000W
SV-5000W

SERVICE *Manual*

For mechanical disassembly and adjustment, refer to the “Mechanical Manual” (DX-9R → AC68-00001A).

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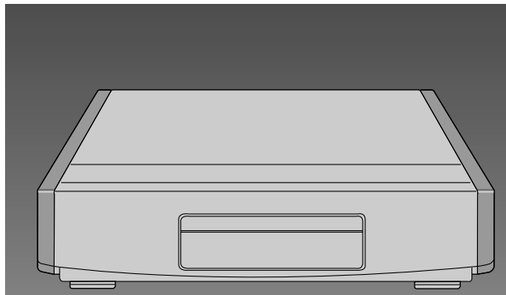
AC68-00434A

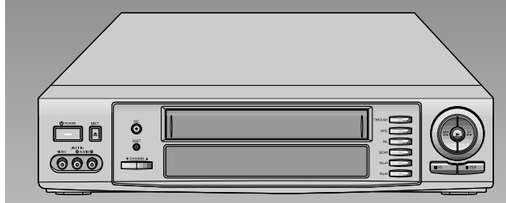
SERVICE MANUAL

SV-7000W/SV-5000W

VIDEO CASSETTE RECORDER



SV-7000W



SV-5000W

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